

**Policy Department
Economic and Scientific Policy**

Delocalisation of EU Industry

**Delocalisation and the challenge of structural adjustment
A review of policy options**

(IP/A/ITRE/FWC/2006-087/Lot1/C1/SC1)

This study was requested by the European Parliament's committee on Industry, Research and Energy (ITRE).

Only published in English.

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Manuscript completed in June 2007.

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Executive Summary and Conclusions

Relocation or delocalisation – derived from the French ‘délocalisation’ – is a hotly debated topic; it refers to the migration of jobs and production to other parts of the world, mostly poor(er) developing countries. The debate is fuelled by the perception that relocation has become more pervasive within and across sectors, with not only traditional low-skilled, but also high-skilled jobs being ‘delocalised’. Fear and public anxiety over job losses, fed by the popular media, have engendered a vivid policy debate. From a more rational perspective, relocation and deindustrialisation are the tangible and visible effects of a process of structural adjustment in which global economic integration, international competition and technological development are key drivers. Rather than focusing on its short-term effects, relocation should be approached from this broad, encompassing perspective.

There is no universally shared definition of relocation or delocalisation. Definitions used vary from very strict to much broader, encompassing notions of the concept. In its stricter interpretation, relocation implies ‘the closing or scaling down of a firm’s activities in the domestic market following the shifting of parts of the production chain abroad’ (background note European Parliament, 2006). In the more broadly encompassing version, relocation implies the transfer of economic activities to locations elsewhere, outside the home country.

However, for a number of reasons both the narrow and the broad notion of relocation as currently used in the European debate are misleading. First, relocation is not necessarily a negative sum game as the prevailing definition suggests. In zooming in on the short-term effects (e.g. lay-offs), the medium and longer-term effects associated with processes of structural adjustment are ignored, as are the motives of firms for relocation. These include cost savings, but also improved access to foreign markets and strategic assets including human capital. While certain jobs may indeed be relocated (offshored), this can open up new opportunities for existing or new business activities in the source (i.e. home) country. International sourcing is a dynamic ‘game’. Second, by confining the discussion to relocation as the migration of jobs and production to countries outside Europe, relocation is mistakenly taken as a one-way street only. A more integral perspective also involves the relocation by non-European firms to Europe. Third, by defining ‘abroad’ as being outside or external to the European Union, the (potential) importance of relocation within Europe is ignored. Intra-EU relocation (‘near-shoring’), however, most importantly from the ‘old’ EU-15 to the ‘new’ EU-12, could offer a serious and credible alternative to relocation to other parts of the world. In overlooking intra-EU relocation, the importance of the EU domestic market as a source of comparative advantage and potential future strength is significantly underestimated. Fourth, by taking a strict notion of relocation, the debate is unnecessarily narrowed down to job losses and firms moving abroad, while putting a premium on the use of anecdotal and partial data, and enhancing an atmosphere of fear and anxiety. What is needed is a more complete and balanced picture of the real essence of what is going on, in the context of the wider processes of globalisation and technological change.

The overall economic magnitude and impact of relocation to the European economy is comparatively small. While relocation may cause serious discomfort to the workers and families facing displacement, the extent to which these job losses occur appears to be modest relative to both the size of the European labour market and the ‘normal’ process of job creation and destruction. Quantifications of potential future impact, such as that by Forrester (2004) predicting job losses of around 1.17 million for the EU-15 by 2015, might seem enormous, but dwindle when analysed against and compared with the total employment number for the EU-15 as a whole, which amounted to 175 million jobs in 2005. Moreover, 1.17 million is the expected cumulative total for 10 years (2005–2015).

Again this figure dwindles when compared with the 1.8 million jobs that were created (not shed!) each year during the preceding period 1995–2005.

The limited extent to which relocation has been taking place so far does not only apply to Europe but is also observed in other advanced economies, such as the United States. Relocation should instead be seen as a ‘prospective’ phenomenon, putting emphasis on the debate about (preparing for) future developments. A key aspect is the recent shift between tradable and non-tradable services. The production of tradable goods has been being relocated to low-cost countries for decades. As a result of globalization and technological progress, most importantly in ICTs (including the Internet, software and software-related services), some of what used to be secluded local or national services markets have now become internationalized, with European (national) firms facing strong international competition. Business process outsourcing (BPO) services from India serve as a case in kind. The associated relocation of jobs in services is relatively new. Most affected are impersonal services which are easily offshorable, facilitated and driven by the information and communication technology revolution. Personalised services are less likely to be relocated.

The discussion on relocation in Europe predominantly focuses on new competitors, in particular China and India. What is usually neglected is the role of the European Union itself. This especially applies to the process of European market integration (the ‘single’ market) and its effect on the subsequent restructuring of various industries. The combination of the single European market and the process of ongoing enlargement has enabled a large(r) EU domestic market and has facilitated important economies of scale and scope, as well as created competition. From the point of view of productivity – the most important key variable driving income and wealth – relocation is part of a substitution process in which spatial allocation is key. In this dynamic process, the enlargement and integration of Europe itself is a strong force that enables, eases and speeds up a number of these drivers.

From an economic-theoretical point of view, globalisation, European integration and new technologies (especially information and communication technology, ICT) have lowered the transaction costs involved in trade. Not wage levels as such, but overall productivity performance is the determining factor for retaining or losing jobs in the medium and longer term. As transaction costs in international trade for impersonal services will tend to decrease further over time, it is not unlikely that these services will follow agriculture and manufacturing in becoming declining sectors in terms of employment and relative contribution to income and wealth. This shift might call for major readjustments in the years to come.

Policy options

It should be emphasised that a proven set of policies to address the causes and remedy the adverse effects of relocation does not exist. There is no such thing as a quick fix. The majority of studies abstain from discussing policy options in detail. Their prime focus is on debunking and demystifying the magnitude and potential impact of relocation. When it comes to policies, most advocate a mix of adjustment assistance policies aimed at mitigating or cushioning the effects of relocation and facilitating transition on the one hand, and policies facilitating the creation of sufficiently high growth and robust jobs on the other (growth and employment policies).

Tackling the direct and short-term effects of relocation should go hand in hand with a longer-term vision to enable citizens and firms to find their way and reap the benefits in a changing economic environment. While there is a role for government – at either the EU or the Member State level – policies are no panacea per se and should not be seen as substitute for the ‘right’ mindset and behaviour to approach the future.

Much will depend on the flexibility, proactiveness, inventiveness and creativity of individual citizens and firms to adapt to changing conditions and circumstances.

The relocation debate also calls for an important warning – as not only the do's, but also the don'ts deserve mentioning here. At any cost and at any time, a retreat to protectionism should be avoided. Trade, international competition and technological change are the main pillars and driving forces behind the process of specialisation and comparative advantage on which our wealth and welfare is built. Enabling and enhancing trade – the free movement of goods and services between countries – is hence vital, as is the free movement of capital (either financial or physical) and labour (blue-collar and white-collar workers alike) within and between countries.

Apart from generic policies to stimulate growth and employment, specific policies to address relocation include measures that aim to (i) mitigate or cushion the short- and medium-term effects of relocation by providing insurance, reducing inequality and enhancing the functioning of markets, and (ii) increase the flexibility of Europe's citizens and firms, improve the ability to adapt and adjust to shocks, and enhance the capacity to respond adequately to yet unknown features and requirements of the future global economy. A key element here is education.

Measures to mitigate the short- and medium-term effects of relocation should protect workers, not jobs. There appears to be a wide consensus on the desirability of social safety nets to mitigate the negative effects for workers. Direct assistance to trade-displaced workers could – apart from a system of unemployment insurance – also include more specific policies to reactivate workers by means of active labour market programmes (ALMPs) including job-search assistance, counselling, retraining, mobility allowances and other re-employment services. Innovations in improving the effectiveness of existing safety net provisions include the Danish model of flexicurity and wage insurance.

Less agreement appears to exist about the need and usefulness of targeted programmes serving specifically relocation-displaced (i.e. trade-displaced) workers (such as the US Trade Adjustment Assistance (TAA) programme and the recently founded European Globalisation Adjustment Fund (EGF)). Rather than targeting all trade-displaced workers, specific displaced groups (e.g. the unskilled) can be supported to ease and speed up the process of labour reallocation. As the effects of relocation tend to be localised, hitting specific regions and/or sectors, specific targeting is preferable. This applies especially when the impact of relocation threatens to distort the existing local labour market. Targeting could take the form of occupational incentives (training) or geographical mobility incentives, such as relocation grants and mobility assistance to induce workers to move elsewhere. Instead of targeting workers (the most preferable form of targeting), policy support could also target firms, industries or regions. However, experience shows that the conditions for success or failure of such policies remain unclear beforehand. Sectoral support to improve the competitiveness of affected industries can quickly become a form of 'picking losers' (as a variant of the non-desirable 'picking winners'). Measures to revitalise the local economy – a form of regional policy – again largely depend on how such support is provided. Temporary measures should lead, with a focus on adjustment and renewal.

Growth and employment

Apart from a mixture of measures aimed at maintaining macroeconomic stability, creating the 'right' business and investment climate and taking care of the right framework conditions, the focus of growth and employment policies should be on coping with the main underlying processes associated with relocation, i.e. globalisation and technological development, as well as on anticipating the effects of demographic change (ageing). Stimulating flexibility, adaptability and proactiveness are keywords here, and so is knowledge.

The policies that are needed to confidently approach the future in the face of globalisation, international competition, accelerating technological change and demographic change reflect to a large degree the policies that facilitate and stimulate a vibrant knowledge-based economy. The revised Lisbon Strategy for Jobs and Growth and subsequent actions can be seen against this background.

One of the weaknesses of the European economy is its structural labour market rigidities. This is caused partly by the (still) highly fragmented European labour market, and partly by the lack of trans- and even intra-national geographical mobility of workers, even in the high-skilled segment. Another part is related to institutional failures and policies in need of modernisation, ranging from regulatory burdens at both Member State and European level to (overly) generous welfare systems with little incentives to (re)activate the unemployed and increase labour market participation. It is essential to introduce more wage flexibility, and reform tax and social benefit systems into lean and mean modernised systems. Flexibility is also required in the sense of individuals learning to cope more readily with non-routine tasks and occupational change, an essential asset in a knowledge-based economy.

The ability to adapt flexibly to structural change should be at the heart of the policy recipe to address the phenomenon of relocation in the medium and longer term. This ability has first and foremost to be sought in the human capital stock. Education (from primary school to university), (re)training and life-long learning are policy instruments to foster the capacities and abilities of our labour force and the population at large. There is a need to adjust educational systems in the face of new and changing systems of production, as well as to go beyond traditional classroom education, with policies that focus on on-the-job and life-long learning. Blinder (2005) makes a very important observation, which needs to be taken very seriously in preparing ourselves and our children for the future. The issue is less how much we educate, than how and what we educate. In the future knowledge-based society, investments in human capital will be key. The quality and creativity of Europe's labour force form the basis for maintaining its competitiveness, from the micro level (firms) to the macro level of the individual Member States and the European Union.

Glossary

List of abbreviations used in the main document

ALMP	– Active Labour Market Programmes
ATAA	– Alternative Trade Adjustment Assistance
BEEPS	– Business Environment and Enterprise Performance Survey (World Bank)
BEPA	– Bureau of European Policy Advisers
BPO	– Business Process Outsourcing
CEC	– Commission of the European Communities
DIHK	– Deutscher Industrie und Handelskammertag
DWS	– Displaced Worker Survey (US survey investigating the number of workers displaced as a result of job losses in organisations)
EESC	– European Economic and Social Committee
EGF	– European Globalisation adjustment Fund
EMCC	– European Monitoring Centre on Change (publishes the quarterly <i>European Restructuring Monitor</i> (ERM) summarising restructuring trends in Europe and effects on employment)
EP	– European Parliament
EPL	– Employment Protection Legislation
ERM	– European Restructuring Monitor (see EMCC)
FDI	– Foreign Direct Investment
ICT	– Information and Communication Technologies
IPCC	– Intergovernmental Panel on Climate Change
OECD	– Organization for Economic Cooperation and Development
SMEs	– Small and Medium-sized Enterprises
TAA	– Trade Adjustment Assistance
WTO	– World Trade Organization

1 Introduction

1.1 Delocalisation – an ongoing debate

Relocation or delocalisation, a term derived from the French ‘délocalisation’ and predominantly used in Europe, is a hotly debated topic.¹ This not only holds for the European Union and its Member States, it also applies to other advanced economies like the United States and Australia. It refers to the migration of certain jobs and production to other parts of the world, mostly poor(er) developing countries. The current debate is fuelled by the perception that relocation has become more pervasive within and across sectors. No industry seems to be exempt or sheltered from globalisation and increasing competition any more (CEC, 2005a). Whereas relocation in manufacturing has been evident since the early 1970s, and became a common phenomenon in the 1980s and 1990s, lately relocation has spread to hitherto non-tradable service industries. Nowadays not only traditional low-skilled, but also high-skilled jobs may be ‘delocalised’. Fear and public anxiety over major employment losses, fed by the popular media and put on the agenda by trade unions and others, have engendered a vivid policy debate.

Relocation has to be seen against the background of a much wider process of structural change caused by increasing globalisation, international competition and technological development. The emergence of new technologies has enabled a dramatic decrease in communication and transport costs. At the same time, they have stimulated the creation of new goods and services, have opened up new markets and have enabled entirely new ways of doing business. Internet-based commerce and trade, from Amazon, eBay and YouTube to business process outsourcing (BPO), has revolutionised the way in which businesses and consumers operate and interact. ICTs have changed our lives and will continue to do so, also in other ways (think of the possible impact of ongoing automation, robotics, micro-systems and virtual manufacturing). There are many signs that we are indeed witnessing a Third Industrial Revolution (Toffler, 1980; Greenwood, 1999; Blinder, 2006). And most probably we are only at its beginning.

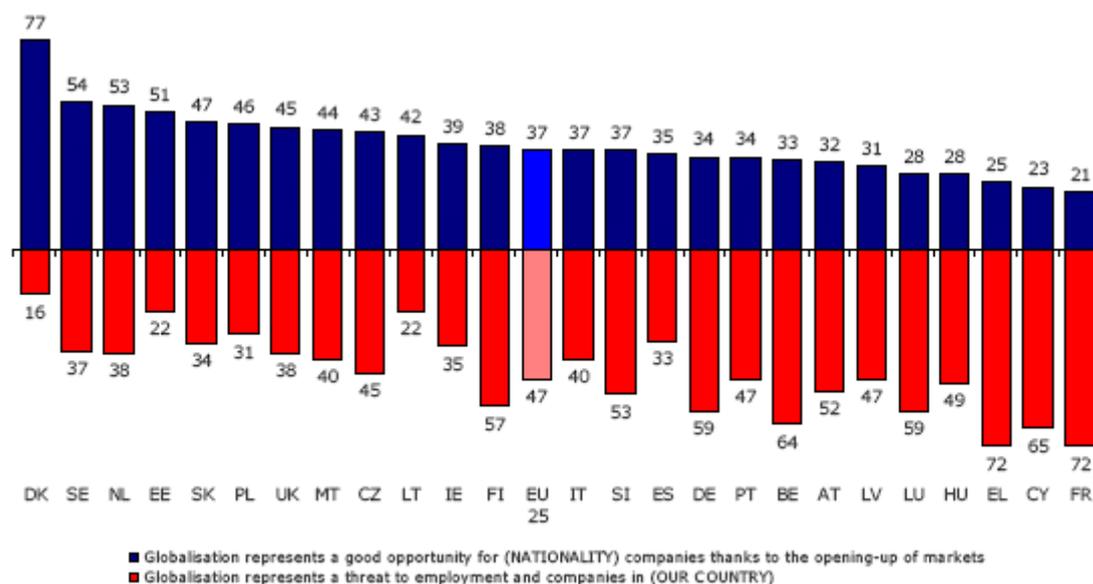
At the same time, trade liberalisation – the lowering of tariff and non-tariff barriers and the opening up of markets – under the framework of the World Trade Organization (WTO) has caused globalisation to take on a new dimension. Globalisation, which is defined as the process of economic integration, with resources becoming more mobile, economies becoming increasingly interdependent and financial markets becoming increasingly international (OECD, 2005d), is one of the prime motors of structural change. This integration includes the emergence of China and India on the global economic stage. These are both low-wage economies with a huge labour surplus and a large potential not only in terms of market size (economies of scale and scope, and number of consumers) but also in terms of the power to set the rules of the game (Van der Zee, 2006). The strong and persistent growth of China, the world’s manufacturing powerhouse, and India, the world’s leading offshoring destination in IT services, and – more importantly – the big question mark for what the further integration of these economies will bring us in the Information Age, are among the prime fear factors in the relocation debate.

¹ Delocalisation and relocation are used interchangeably in this review, and refer to the same phenomenon.

Recent survey results show that almost half of Europe’s citizens regard globalisation as a threat to employment and companies in their country, while less than 40 per cent think that globalisation represents a good opportunity for companies in their home country (see Figure 1.1).²

Over the last three years people generally have become more negative about globalisation. In 2003, 56 per cent still saw globalisation as ‘a good opportunity’ (CEC, 2003a). Fears of globalisation appear to vary substantially between Member States. Whereas 72 per cent of the French and Greeks think that globalisation represents a threat, only 16 per cent of the Danes and 22 per cent of the Estonians and Latvians think the same. The Danes, the Swedes and the Dutch lead the countries that predominantly perceive globalisation as an opportunity. Whereas relocation and globalisation are not the same, these figures indicate that sentiments differ significantly between Member States.

Figure 1.1: Attitudes of European citizens to globalisation



Source: Eurobarometer 251 (CEC, 2006c)

The media hype and public anxiety surrounding relocation, and the general confusion about its reach and possible impact in the short and longer term, have recently engendered a wave of in-depth academic research. Especially in the United States, the intellectual debate has produced a number of interesting views (e.g. Bhagwati et al., 2004; Amiti and Wei, 2004; Mankiw and Swagel, 2005; Jensen and Klezter, 2005; Blinder, 2006). In Europe, the discussion has so far been largely political, with contributions by, inter alia, the European Economic and Social Committee (EESC, 2005, 2006), the trade unions (e.g. Galgóczi et al., 2005), and chambers of commerce (e.g. Assemblée des Chambres Françaises, 2005; DIHK, 2003). Contributions from the academic community are few compared with the United States (e.g. Kirkegaard, 2005; Biermans and Van Leeuwen, 2006). Private consultancies (e.g. Forrester, 2004; Reckon LLP – see EESC, 2006) have influenced the debate as well, predominantly in their role as (survey) data providers in view of the lack of official statistical data (see also Box 1.2).

² When asked to answer the following question: ‘Which of the following two propositions is the one that is closest to your opinion with regard to globalisation?’

The questions that have been raised in the debate range from ‘Are there serious grounds for fear?’ and ‘What exactly is the problem that we are dealing with?’ to ‘What is the potential for relocation of production and jobs in the future?’ and ‘What are the solutions and how do we find them, including policy predicaments?’ One of the factors that has added to the confusion in the debate is the loose boundaries of the concept of relocation itself. Different interpretations of what delocalisation is and what it is not (see Box 1.1) have tended to blur and obscure the discussion rather than ease its clarification. Measurement problems have contributed to *ad hoc* and sketchy accounts of relocation, and have fed the general confusion.

1.2 Different perspectives on delocalisation

There is no universally shared definition of relocation or delocalisation in the ongoing European political debate. Definitions used vary from very strict to much broader, encompassing a range of notions of the concept (CEC, 2005a; see also Box 1.1). In its stricter, narrower interpretation, followed in a study for the European Parliament and by the European Economic and Social Committee, relocation implies ‘the closing or scaling down of a firm’s activities in the domestic market following the shifting of parts of the production chain abroad’. In the broader, more all-encompassing version, relocation implies the transfer of economic activities to locations elsewhere, outside the home country. Central to the narrow interpretation of relocation is the cessation – closing or scaling down – of a firm’s activities, apart from migration itself. In the version advanced in a background paper for the European Parliament, relocation includes an element of vertical fragmentation of production *by definition*. In the broader notion, relocation includes a much wider range of corporate strategies, not necessarily entailing vertical fragmentation. Relocation could also entail strategies to invest in foreign sites to improve, for example, access to local markets abroad, with relocation effectively amounting to a change in export strategy.

In the ongoing European policy and political debate on delocalisation, the strict notion of relocation appears to dominate (see Box 1.1), unlike for example the United States, where offshoring (i.e. the *broader* notion of relocation) is the prime focus. Interestingly, the discussion in the United States, even if largely political, is to an important extent fuelled and influenced by academia, being led by influential economists (e.g. Bhagwati et al., 2004; Mankiw and Swagel, 2005; Blinder, 2006), whereas the European debate is largely political, seemingly driven by the popular media.

However, for a number of reasons both the narrow *and* the broad notion of relocation as currently used in the debate are misleading. To understand why this is the case we shall shortly focus on how and for what reasons firms – which are at the very basis of relocation since it is firms that move, not persons – relocate in the first place. Firms can relocate activities to foreign sites in essentially two different ways: by sourcing internally to foreign-based affiliates (i.e. within the same firm) and by sourcing externally (i.e. to other foreign firms).³

³ Technically *outsourcing* refers to the sourcing of an activity outside a company (such as the contracting out of billing services), which can also take place within the domestic market, while *offshoring* is the movement of production outside a country. In this sense, offshoring is synonymous with delocalisation as broadly defined.

Box 1.1: Delocalisation – prevailing definitions in the European debate

- European Parliament: ‘Relocation – sometimes also referred to as delocalisation – means the closing or scaling down of a firm’s activities in the home market following the shifting of parts of the production chain abroad. (...) For the European discussion, abroad means usually outside the EU’ (EP, 2006: 3, 5).
- European Economic and Social Committee: ‘Delocalisation occurs when a business activity is totally or partially ceased, to be reopened abroad by means of direct investment. Within the EU two types of relocation: internal (transfer of business activity to another Member State) or external (to non-EU countries)’ (EESC, 2005).
- European trade unions: ‘the process of shifting economic activities towards foreign sites, including the closing of domestic sites or scaling down their activities’ (Galgóczi et al., 2005).
- Bureau of Economic Policy Advisers: delocalisation is defined as ‘the process of relocation of economic activities towards foreign sites, closing down activities at home’ (BEPA, 2006: 36).
- European Commission (DG Enterprise): delocalisation concerns the transfer of production and of other manufacturing activities to locations outside the home country (CEC, 2003).

Delocalisation – the anglicised form of the French ‘*délocalisation*’ – and *relocation* are used interchangeably in this review, referring to the same phenomenon. It should be noted that in the Anglo-Saxon literature delocalisation is commonly referred to as *dislocation*. Delocalisation should not be confused with the term *deindustrialisation*, which predominantly points at the process of migration and disappearing *manufacturing* industries. While the two are related, deindustrialisation also points at another phenomenon, which is the increasing dominance of services in our economy.

While both forms of international sourcing are referred to as offshoring, the former is known as *captive offshoring*, whereas the latter is termed *offshore outsourcing* (see also Figure 1.2).⁴ International sourcing can be seen as part of a broad variety of internationalisation strategies for firms. From an economic theoretical point of view, however, international or global sourcing is a form of trade (Bhagwati et al., 2004).

The benefits of global sourcing for a firm can be substantial. It allows firms to lower costs (predominantly wage costs), to tap into new customer markets and to find new talent (human capital), to benefit from around-the-clock production (for just-in-time delivery of both goods and services), and – more broadly – to organise global operations efficiently and orchestrate global value networks. Fragmenting production and reorganising value networks can bring within reach economies of scale and scope that otherwise would not have existed. Estimates of the total cost savings from global sourcing vary across a wide range, from 15–30 per cent (Atkinson, 2004) to 30–60 per cent (Kirkegaard, 2005). While absolute numbers to date are not large, growth rates have been high, and growth is expected to continue. International sourcing in most cases implies a reorganisation of the way in which a firm creates value, which may involve both the cost *and* the sales side of things. Such reorganisation is enhanced by the increasing possibilities to physically fragment production, both by easier, quicker and less costly ways of communication and doing business, and by using more rapid and less costly forms of transport.

⁴ Also known as international insourcing and international outsourcing, respectively.

But does international sourcing necessarily imply the cessation of business activity in the source (i.e. home) country – a basic underlying *assumption* in the definition of delocalisation? No, it does not. That is, it does not necessarily imply it. What it implies is a reshuffle of a firm’s operations and value propositions in order to remain competitive against the opportunities and changes it faces in a globalised market context, in both factor markets (physical and financial capital, human capital) and product markets (goods and services; new customer markets in China, India and elsewhere). While fundamentally a dynamic ‘game’, sourcing could well mean that some activities or functions in the source country are increased, while others are relocated.

Relocation is not necessarily a negative sum game, as the prevailing definition makes us believe (see Section 3 for a further elaboration of this argument). Also, and related, the net gains of relocation in the medium and longer term might well outweigh the short-term implications in terms of divestment and job losses. This applies at the level of the firm, but also at the level of a country as a whole. By zooming in on the short-term immediate effects of relocation in terms of production and employment (lay-offs), the debate abstains from considering potential longer-term effects associated with the processes of structural adaptation and reform. This is the *first reason* that both the narrow and the broad notions of relocation as currently used in the European relocation debate are misleading: by ignoring the dynamic nature and the inherent motives and drivers of the relocation process, the focus is one-sidedly on loss of production and jobs. It is also important to consider the possible creation of production and jobs elsewhere, i.e. both at home (the source country) and abroad (the target country).

A second reason that the notions of relocation currently used in the European debate are misleading is closely related to the first one. By focusing on relocation by European-based firms to locations outside Europe, the debate is one-sidedly dealing with firms transferring activities and jobs out of Europe. Yet the relocation debate should be looked at from a more integral perspective, as a two-way street rather than a one-way street, which also involves relocation by firms outside Europe into Europe. In the offshoring literature, this phenomenon is known as insourcing/inshoring.

Figure 1.2: Sourcing and offshoring terminology in a nutshell



Source: Adapted from Olsen (2006)

A third reason is related to the notion of ‘abroad’, which is taken in the European debate as meaning outside or external to the European Union. This completely ignores the (potential) importance of relocation within Europe. Intra-EU relocation (sometimes referred to as ‘near-shoring’), however, most importantly from the ‘old’ EU-15 to the ‘new’ EU-12, could offer a serious and credible alternative to relocation to other parts of the world.

This is especially true when looking at the prevailing wage differentials, specialisation patterns and human capital stock differences within Europe. If intra-EU relocation is overlooked, the importance of the EU domestic market as a source of comparative advantage and potential future strength is significantly underestimated. This also introduces an unnecessary negative bias into the relocation debate itself.

Lastly, by taking a strict notion of relocation, a premium is put on the use of anecdotal and partial data (firms shedding jobs and moving out of Europe), as against a more complete and balanced picture of the real essence of what is going on in relocation and the wider process of globalisation. The combination of both the anecdotal and biased character of the data (see reasons 1 and 2), and the short-term bias of the debate, contributes to an atmosphere of fear and anxiety, while leading away from a rational discussion based on sound arguments. One of the basic starting points is whether the available facts and figures on relocation give a representative picture of what is really happening. It appears that the evidence collected so far is scattered and incomplete, and less than reliable for the purposes of empirically analysing the phenomenon in a sound and proper way (see Box 1.2). There is also the question whether these empirical analyses provide a sufficient and robust basis for policy intervention.

1.3 A broad and integral perspective on relocation

In discussing the phenomenon and impact of delocalisation, a broad perspective will be taken. Delocalisation in this view concerns the transfer of economic activities to locations outside the home country, with activities ranging from manufacturing to services, up to and including R&D, design and other functions. Due to technological progress, services have become more and more tradable, causing a broadening of potential offshoring possibilities. This increased tradability of services is predominantly an effect of the ICT revolution, with tradability linked to so-called impersonalised services (Blinder, 2005), i.e. services that can be delivered electronically over long distances with little or no degradation of quality. An important precondition to the tradability of these services is that they should have a rule-based character (Levy and Murnane, 2004, 2006; Kirkegaard, 2007: 16, 19). Relocation should be viewed and analysed as a 'two-way street', meaning that the analysis captures not only offshoring (captive offshoring and offshore outsourcing) but also insourcing and inshoring. A clear distinction should be made between internal (intra-EU) and external (extra-EU) relocation.

Box 1.2: Measurement and data sources used to assess relocation and restructuring

As there is no universal definition of relocation, a common methodology on measurement is lacking. '[...] the exact quantification and assessment of the extent and impact of relocation is [therefore] a difficult empirical endeavour' (CEC, 2005a). This difficulty is caused by the lack of official statistical data to measure the offshoring/relocation activities of firms and their impact on employment.

Relocation, typically seen as a 'one-way street' phenomenon with a bias on what is happening in the source country rather than in the target country, ignores both the positive welfare and employment impact on low-wage destination countries, and the impact of insourcing and inshoring into Europe from other source countries (either developed or developing), including positive employment effects (Kirkegaard, 2007). Kirkegaard argues that this has not only distorted political discussions but also affected the survey methodologies of empirical studies (ibid.), which he groups into three classes, depending on their academic rigour and measurement quality: private consulting estimates, press monitoring estimates, and proxies of relocation based on official statistics (trade, foreign direct investment (FDI) and input–output data).

In the absence of official statistical evidence, two broad sources on job relocation have emerged: private consulting estimates and press monitoring estimates. The estimates from consultancies are generally difficult to validate as they rely on confidential client data. Furthermore, they usually do not represent a valid sample of firms (Kirkegaard, 2007; CEC, 2005a). Often these surveys are based on firm expectations or intentions, whereas the actual materialisation is not assessed (CEC, 2005a). Furthermore, many consultancies advise their clients on offshoring strategies, a factor that might bias their estimates. These sources therefore represent the lowest category in the validity hierarchy of empirical data, and though useful, should be treated with adequate care.

It is possible to validate press monitoring estimates, but to do so is resource-intensive, and there is a bias towards larger lay-offs, which are reported in the media, whereas smaller restructurings not covered in the media are not taken into account (ibid.). The *European Restructuring Monitor* (ERM), which monitors newspapers and the business press for details of job losses caused by corporate restructuring in all sectors of the EU economies, is a good example. Although it represents the best available data in the validity hierarchy of empirical data, because of its weakness such data represents the 'middle rung' (Kirkegaard, 2007). In the United States, where a Trade Adjustment Assistance (TAA) programme has been in place since 1962, several statistics of workers eligible for TAA and unemployment insurance are used as proxies, as is the 'Displaced Worker Survey' (DWS). However, these vary substantially in their estimates, as they are determined by eligibility criteria, and in the case of the DWS do not differentiate between workers displaced by international trade and those who lose their jobs because of other factors (OECD, 2005).

The most valid data, systematic official statistics on the employment impact of relocation, are not collected anywhere in the world today. As a result, academics who nevertheless want to use official statistical data resort to proxies of indicators of relocation activity, such as trade data, FDI flows and input–output tables (CEC, 2005a). While trade data shedding light on international exchange of inputs can be a good source of information, the data does not discriminate between outsourcing and offshoring. FDI flows also include activities outside the scope of relocation, while not all relocation activities result in measurable FDI flows (CEC, 2005a). Input–output indicators based on the imports of goods or services from within the same industry, as well as inputs that each industry buys from all other industries, are used to assess relocation, but fail to capture relocation where the firms' strategy does not include re-imports.

According to the CEC (2005), the currently most reliable source to assess the extent of relocation is a combination of trade and FDI activities at firm level. The problem is that these data are not widely available and therefore make aggregate and cross-country analyses challenging. Furthermore, this only helps in assessing the phenomenon of relocation overall, and it is not possible to relate this to employment. The weak proxies of employment impact described above only take into account job losses, and not the job creations due to insourcing. These limitations need to be kept in mind when using empirical evidence in debating the phenomenon of relocation.

2 Relocation – size and prospects from an economic perspective

(...) European industry is having to face up to a process of structural change which is beneficial overall and which should be encouraged, in particular by policies that facilitate the development and the use of knowledge. From this point of view, Europe's disappointing performances, notably in terms of productivity, research and innovation, are worrying. This is corroborated by the fact that the delocalisation of industrial activities appears no longer to be limited only to traditional sectors with a high labour density, but are beginning to be observed in intermediate sectors – which constituted the established strengths of European industry – or even in some high-technology sectors, where there are indications of a delocalisation of some research activities, or in the services sector. India and China are the main beneficiaries of these movements. Economic internationalisation offers opportunities, however, to Europe's industry as long as industrial policy supports the necessary evolutions' (CEC, 2004: 1).

2.1 Introduction

How should relocation of EU industry be assessed in the wider economic context of globalisation and European integration? To answer this question an economic perspective on relocation is taken. Section 2.2 starts with a short explanatory framework, based on transaction cost theory, which allows us to further analyse the relocation phenomenon. Section 2.3 describes the two major economic trends of globalisation and European integration, and their impact on relocation. Section 2.4 looks at the potential differential impact of relocation across markets, sectors and regions. Section 2.5 puts relocation into an empirical perspective by assessing the EU-15's economic growth and employment performance over the period 1995–2005. Section 2.6 provides a conclusion.

2.2 A transaction cost perspective on trade

Why do countries trade? According to mainstream economic theory, trade is the result of comparative advantage. When a country is very good at producing a certain good,⁵ it will specialise in its production and trade it for other goods in which it does not specialise.

This perspective does not take into account the fact that trade must be organised. Trade involves costs beyond production costs. These costs arise because the transfer of property rights – which is the essence of trade – involves incomplete information (WRR, 2003: 22–3). Trading partners have to trust each other in order to trade. It may not be known beforehand whether a new business partner is reliable, or whether legislation in, for example, a foreign country is favourable to the type of trade a company wants to undertake. Examples of such transaction costs include transport costs, communication costs, negotiation costs, information costs, enforcement costs and legal costs. Transaction costs can simply be described as all costs that (i) have to be made in order to complete an economic transaction (buy, lease, etc.), and (ii) are not related to the production of the good or service as such. Transaction costs are present in all kinds of markets, including goods and services, capital and labour markets.

The notion of transaction costs and the tradability of goods and services are closely related. Agricultural and manufacturing goods are mostly tradables: it is easy to transport and trade these goods. In other words, the transaction costs of trading these goods are low. Non-tradables are mostly goods and services that require a lot of face-to-face contact between the producer and the consumer – for example medical treatment, a concert or a product design.

⁵ Whenever the term 'good' is used in this text, goods and services are meant, unless otherwise stated.

These goods and services are characterised by high transaction costs in trading them over longer distances, and are therefore mostly regionally bound.

It appears that sectors that produce tradables (agricultural and manufacturing sectors) generally experience faster increases in labour productivity than those dealing in non-tradables. The reason is that as a result of competition, the international market exerts a powerful incentive for rationalising production. For non-tradables this incentive is not present, as they are regionally bound and not subject to international competition. Moreover, traditionally increasing labour productivity in agriculture and manufacturing sectors has always been far easier than in services, because of mechanisation and automation. Substituting labour for capital has speeded up the specialisation process and allowed strong productivity increases in these sectors. For non-tradables, increasing productivity would in many cases imply a deterioration of quality (think of, for example, increasing the number of students in a classroom with one teacher, and its effects) (Blinder, 2005: 19). Agricultural and manufacturing sectors are therefore able to increase production levels much faster than the number of jobs they offer. For the same reason, traditional non-tradable sectors (mostly services) will in the course of time keep an *increasing* part of the working population employed.

Because international competition constrains the profit margins on tradables, and because of rapid growth in productivity, tradables tend to become relatively less expensive over time. Companies that deal in tradables spend fewer resources on wages for workers over time, because with productivity increases the number of workers in production decreases. At the same time, their profit margins are constrained because competitors will most probably offer rival goods at a lower price on the market. As a result, consumers spend on average a smaller (relative) part of their budget on agricultural and manufacturing products like food or cars today than they did, say, half a century ago.

Non-tradables by contrast will become relatively more expensive over time, compared with tradable goods that benefit from large productivity increases. This phenomenon, named after the economist William Baumol who acknowledged and modelled the process described, is called *Baumol's cost disease* (Baumol, 1967; see also Wölfl, 2003: 7), while Fuchs (1964) was the first to recognise this process.

2.3 Globalisation, European integration and relocation

Transaction costs change over time as a result of technological change, knowledge accumulation, policy and institutions. Technological change is as much a major influence on transaction costs as it is on production costs. One of the effects of technological change is that it changes the degree to which goods and services are tradable or non-tradable. Recent technological developments appear to combine well with the recent trends of globalisation and European integration. Together they have had, and still have, a tremendous – and mutually reinforcing – effect on trade and FDI flows, both inside and outside Europe.

2.3.1 Globalisation

How can we describe globalisation? Technological change decreases transaction costs in the long run. The past two industrial revolutions have largely been the result of rapid decreases in production costs as a result of new technologies being introduced, and the substitution for labour of capital and automation (broadly defined). The ensuing process of specialisation was accompanied by a huge shift from farming to manufacturing (the First Industrial Revolution), and another – still ongoing – shift from manufacturing to services (the Second Industrial Revolution). The current wave of globalisation is characterised by accelerated decreases in transaction costs.

In particular, transport, information and communication costs declined sharply due to a rapid diffusion of ICTs across firms, industries and the public. The economic effect of this information revolution is that more economic transactions have become viable, and new types have come into play, as trade can be conducted far more cheaply, easily, quickly, and over larger physical distances than ever before.

New markets and new potential customers, but also new production locations, came within the reach of producers. Combined with the opportunities offered by multilateral trade liberalisation across the board (i.e. the lowering of trade barriers and an opening up of various markets), the Information Age has opened up entire new possibilities in terms of trade, FDI and relocation of production. In many cases relocation has become an attractive option, with regions having very different production and transaction cost characteristics – for example in their wage levels, regulations, institutions and knowledge base – the differentials of which offer interesting business opportunities.

An important additional aspect of globalisation is the shifting balance between tradable and non-tradable *services*. The production of tradable goods has been being relocated to low-cost countries for decades. A relatively new phenomenon is the relocation of jobs in service sectors to developing countries like India. A common distinction is made here between *personal* services (i.e. those requiring, to a certain extent, face-to-face contact between supplier and client) and *impersonal* services (those not requiring intensive face-to-face contact) (see Blinder, 2005: 13). Impersonal services appear to be those that are outsourced to low-cost countries due to ICT. Examples include call centres, customer service and computer programming.

Bhagwati et al. (2004: 4–5) point to a very relevant distinction made by the WTO in services traded: between mode 1, 2, 3 and 4 services. Mode 1 services include those services at arms' length (far away), with the supplier and client remaining at their respective locations (examples: electronic commerce, designers, architects, consultants). Mode 2 services are those provided by moving the service recipient to the location of the service provider (example: tourists). In Mode 3 services, the service provider establishes a commercial presence in another country, a process which involves FDI (example: banking). In Mode 4, the service seller moves to the location of the service buyer (examples: construction/consulting). Bhagwati et al. (2004) maintain that Mode 1 services are the ones economists generally refer to when discussing outsourcing/relocation of jobs, but that the other service trade modes are involved in the popular discussion, which presents a fallacy. The discussion on definitions is thus a useful one: it should be clear what exactly is meant by relocation with regard to globalisation. This is especially true for the European debate, which appears to be dominated by a rather peculiar interpretation of relocation (see also Section 1).

What can transaction costs tell us about relocation? First of all, transaction costs should be taken into account together with production costs: it is the sum of the two that matters. Traditionally, 'western' jobs (i.e. jobs in advanced economies) combine high wages with high productivity, while jobs in developing countries combine low wages with low productivity. Of course, in the end wage/productivity differentials (and expected potential) determine which one is the better choice in terms of production (and job) location.

The claim made by those fearful of relocation appears to be that this will lead to a loss of 'western' jobs. But it is equally possible that job creation in developing countries will occur simultaneously with job creation in advanced economies (Bhagwati et al., 2004: 11–12). In production functions it is mostly assumed that capital and labour only function efficiently when combined in certain relative amounts; this appears to apply to types of labour, too. The reason for this is different wage–productivity trade-offs. These render labour a regionally bound production factor. Capital is much more mobile, and hence regional complementarity does not apply.

In abstract form:

$$Y = f(L_w, L_d, K)$$

Where Y = production
 L_w = labour in developed countries
 L_d = labour in developing countries
 K = capital.

Because of globalisation the wage and productivity profiles of some developing countries are changing. Indian programmers and Chinese researchers can nowadays compete with their western peers because of different – and profitable – wage–productivity differentials. A first effect of globalisation is therefore the following: the production of knowledge and education will shift towards these developing countries, while improving the productivity and knowledge of workers in those countries. A second effect is that it becomes more rewarding to relocate certain businesses to developing countries because it is easier and cheaper to maintain contact with distant company branches as a result of ICT tools.

These changes have several possible effects in terms of job creation and relocation:

- Creating jobs in the western world: new ICT applications create new markets and new consumer demand (e.g. the explosion of demand for internet services at the end of the 1990s).
- Creating jobs outside the western world: demand for new products, notably those that can easily be transmitted through ICT appliances, creates opportunities for job creation in developing countries, as long as these feature profitable wage–productivity trade-offs.
- Substituting jobs in developing countries for jobs in the western world: this is probably the prime source of fear among workers and voters, and the reason for politicians to respond to relocation. Profitable wage–productivity trade-offs in developing countries plus decreasing transport costs for certain products (notably impersonal services) can make it profitable to shift from western employment to employment in developing countries. Nevertheless, it is also possible that companies from developing countries will relocate or create jobs to/in developed countries because the latter have profitable wage–productivity profiles (relocation is a two-way street).
- Destroying jobs without any replacement (cf. jobless growth). If there are no new business ideas and investment responses to the new market supply, and this is combined with a decrease in the costs of information, communication and transport, certain jobs in the *traditional* communication (post, fixed telephone) and transport sectors (e.g. traditional airliners as against the new price fighters) might simply be rationalised away without – in the extreme case – any jobs replacing them. An important underlying longer-term determinant here appears to be general economic growth, as it influences consumers' incomes and therefore market demand.

Indeed, access to new markets, access to a highly skilled and productive labour force, regulatory regimes and tax regimes are mentioned in surveys as motivators for relocation. Other motivators include cutting down on costs, although both European and US firms report that they have not experienced large cost savings from relocation (BEPA, 2006: 50–2; Olsen, 2006).

Does the trend described present a threat to employment? Apparently not. Agriculture and manufacturing have never disappeared from the western world. On the contrary, the relative and absolute number of people working in the agricultural and manufacturing sectors has been declining, but the value added of those activities has in general risen over the decades.

But the number of people employed in services has risen fast, and the value added created in services has also risen faster than in manufacturing. However, due to the increased use of (physical) capital, labour productivity in manufacturing has risen faster than in services.

The main threat appears to be that usually products face downward-sloping demand curves.

Applied to the cost structure of tradable and non-tradable goods respectively, and keeping in mind the shifting degree to which services are tradable, those fields that will take up many jobs (personal services) will face decreasing relative demand, and those that are tradable (goods, impersonal services) will face increasing relative demand. Exceptions are so-called luxury goods (which generally enjoy increasing demand as people get richer) and inferior goods (products people want less as they get richer). For this reason many authors take what has happened so far (call centres in India, FDI in China) to be only the top of the iceberg. Globalisation, in their view, is largely a prospective phenomenon: the worst pain has yet to come (Blinder, 2005: 7–8, 19–22).

To date it appears that the shift from agriculture to the manufacturing sector, and later on from the manufacturing sector to services, has not left the western world worse off in the long run. The absolute number of jobs in tradable sectors (agriculture, manufacturing, impersonal services) might stabilise; but the absolute number of jobs in non-tradable sectors (personal services) will rise, the more so because the population is ageing. An important reason for this is that consumer preferences change over time. Nowadays there is a tendency among prosperous consumers influenced by economic growth to change their tastes from what economists call *normal goods* toward *luxury goods*. In factual terms, consumers spend relatively less of their budget on material goods and relatively more on services. The higher economic growth is, the more occupations that produce non-tradables (such as hairdressers, teachers, researchers, consultants, designers, artists, lawyers, finance consultants) will prosper.

Moreover, the effect of an ageing population in developed countries is twofold. First, an increasing share of the population will have substantial amounts of money to spend, because wage structures in the western world benefit the elderly. The demand for luxury goods might thus well increase more than it has done so far. Second, the workforce is declining in size. This means that unemployment is not the worst threat, unlike the 1980s. The threat, or rather the challenge, is in allocating people to jobs in the most efficient way. In fact there are two challenges: one is in the high-skilled segment where the greatest scarcity is expected, and the other is in the low-skilled segment where the effects of globalisation and international competition are expected to be the fiercest, and re-employment prospects are the fewest, other things being equal.

2.3.2 *European integration*

An important related trend is European integration. Since it was founded in 1957, the ‘grand project’ called the European Community is a prime example of a gradual but steady removal of barriers to the free movement of goods, people and capital. The principal mechanism of the process of economic integration is and has been decreasing transaction costs. Other examples include the introduction of the euro and the process of EU enlargement.

The free movement of goods and persons has had a positive effect on the size as well as the functioning of the EU’s domestic market. The realisation of the internal market for goods has seen enormous progress over the last decades. In other markets, notably the labour and the services markets, progress in European integration has been less prominent so far.

The European Union is still far from functioning as a fully integrated economy. While (the lack of) policies is a factor here, other factors such as tradition, habits, language and culture also play an important role.

For example, Europeans appear to be less flexible and regionally mobile than their US counterparts. Only a small percentage of highly educated workers appear to migrate across the EU Member States for work-related reasons.

The European labour market suffers from a few other market influences, like powerful trade unions in some countries, extensive job protection, high labour tax levels and job skills lacking flexibility.

Powerful trade unions may demand higher wages without questioning whether productivity development allows for wage increases. Moreover they practise extensive job protection, with the effect of keeping newcomers out of jobs and preventing flexible operation of the labour market. High labour tax levels provide a negative incentive for higher incomes to raise productivity. The lack of regional and job flexibility prevents the European labour market from working as flexible as the US labour market. For example, it is rather common in the United States to move house from the east coast to the west coast, but in Europe people seldom move over such distances because of work, resulting in lagging allocative efficiency. The large-scale migration of labour is only observed in markets for low-wage and seasonal work.

The introduction of the euro has had a profound influence on the national economies of the EU Member States. The way in which the euro decreases transaction costs is quite obvious: it is no longer necessary to pay currency exchange fees, easing business and travel. Perhaps the most striking effect, however, is the integration in monetary policy. That one central bank sets interest rates and applies general control means that the business cycles of the countries in the Eurozone are converging. Monetary policy was previously used by Member States to maintain the exchange rates of their national currencies at low levels so as to keep their national products affordable to foreign countries. Since the introduction of the euro in 1999 such a policy is no longer possible. Member States have to adapt to European monetary policy, with price stability as its only policy goal (unlike the monetary policy applied by some Member States previously). Hence factories in countries such as Italy experience huge efficiency problems and have to improve their productivity and competitiveness to keep in business. This represents a positive development in terms of relocation in the long run. However, in the short run the process can be painful for companies and their stakeholders.

From a relocation perspective, European integration presents an opportunity rather than a threat. Integration implies attaining a higher level of specialisation and hence allocative efficiency due to disappearing borders. Regional specialisation will in the end benefit all Europeans. The transition period towards a new equilibrium in terms of costs, wages and productivity involves dealing with vested interests, as some will lose from new specialisation patterns in the short run, largely on the supply side in the EU-15. The net benefiting parties are mostly consumers and suppliers in the new EU Member States (the new EU-12).

2.4 Does relocation affect markets, sectors and countries differently?

The two major economic trends identified, globalisation and European integration, affect goods and services, and capital as well as labour markets. We shall focus on the effects on markets that are most relevant from a relocation point of view. In particular, the labour market is interesting here. It is in the labour market that jobs are created, migrated and lost. It is here that there are political fireworks over relocation, often described as offshoring. However it is clear that offshoring of jobs is a relatively minor phenomenon compared with the annual process of job creation and destruction in the United States and Europe (Blinder, 2005; Biermans and Van Leeuwen, 2006: 17).

Having noticed the asymmetric effect of technological change on sectors (i.e. driving employment out of agriculture and manufacturing sectors towards service industries), and having noticed as well that relocation effects in terms of job losses are relatively minor, we can ask how sectors behave. The share of employment in manufacturing sectors turns out to be decreasing steadily in comparison with the share of employment in service sectors. But the decline is divided unequally; notably, the textile and metal manufacturing sectors are experiencing a steady decline (Pilat et al., 2006: 8). The most influential factor behind this development appears to be productivity growth and not relocation. One strong indication for this is the fact the decline in manufacturing jobs in OECD countries has not been accompanied by an increase in manufacturing jobs in non OECD-countries.

Are we indeed seeing the low productivity growth in service sectors that we would expect based on Baumol's cost disease, in OECD countries and the European Union in particular? Some subsectors within the services sector perform well in terms of productivity, notably post and telecommunications and financial intermediation. The productivity growth rates of these subsectors are comparable to those in some manufacturing sectors like machinery and equipment. Moreover, from a general point of view, productivity growth in OECD countries appears to have been picking up relative to productivity growth in manufacturing sectors since 1990, which puts Baumol's cost disease thesis in question. Nevertheless, for most OECD countries the non-service sectors constitute the largest part of overall productivity growth (Wölfl, 2003: 8–15).

From a geographical perspective it appears that the Nordic EU countries, the United States and the United Kingdom have had higher productivity growth over the 1990–2000 period than countries in continental Europe and Japan. It is, however, complicated to point at causes for this asymmetry. General economic performance appears to be a factor (in the early stages of an upward business cycle trend, productivity generally picks up), as is the fact that during the 1990s employment growth in services sectors has been quite modest relative to that of the 1980s (Wölfl, 2003: 16).

2.5 Value added, employment and productivity change across EU Member States: empirical issues

The core question is to what extent relocation affects the European economy. Precise statistical data on the relocation phenomenon so far does not exist (see Box 1.2). What do exist are estimates by private consultancies and so-called press monitoring estimates, as well as proxies based on official statistics on *related* phenomena (FDI, trade, other). It is important to analyse relocation in its wider economic context, as we have argued in the foregoing sections. In this section we try to give an empirical underpinning to the question what relocation in Europe actually means. Is it a threat? Is it a – perhaps temporary – by-product of a process of longer-term structural adjustment? In order to judge and answer these questions, we shall take a look at the macroeconomic context against which relocation has manifested itself so far, i.e. that of the growth of income and wealth, and employment, in Europe.

The main goal of this empirical part is to highlight the key characteristics of Europe's economic development path over the last decade. To this end, developments in GDP growth, employment and labour productivity are examined on a country-by-country and sector-by-sector basis for the EU-15. The past decade is interesting for a number of reasons, political, monetary and economic. This affects countries and regions to a considerable extent (Manshanden et al., 2006; OECD, 2007a). The largely politically driven process of the ongoing enlargement and integration of Europe has affected Europe's economic development to an important degree. The same applies for the main monetary innovation in the European Union: the introduction of the euro in a large number of countries. From an economic point of view, the European Union has experienced a remarkable period of economic growth.

But how did this period work out for the different Member States? In short, this section aims to identify the main economic developments and changes in Europe since 1995; it is stated that relocation is just one of them. This section does not aim to quantify relocation itself.

On average, the EU-15 has shown an average GDP growth rate of 2.2 per cent in the period 1995–2005 (see Table 2.1). Value added in manufacturing has risen, while value added in agriculture, fisheries and forestry has decreased during this period. While manufacturing has grown at an annual rate of 0.4 per cent (just above the zero mark), the financial and business services sector has shown the fastest growth, averaging 3.7 per cent annually.

Table 2.1: GDP growth by country and sector (EU-15), period 1995–2005 (annual averages)

GDP	Total	Agriculture	Manu- facturing	Con- struction	Trade, transport & communi- cation	Financial business services	Other services
				%			
Austria	2.2	-3.0	2.1	2.0	2.3	3.9	1.3
Belgium	2.1	-1.0	0.2	1.7	2.6	3.0	2.5
Denmark	2.2	-6.1	1.9	4.0	2.0	2.9	2.2
Finland	3.5	-0.5	2.4	6.6	4.4	4.5	3.2
France	2.2	-2.2	-0.6	4.6	2.6	3.4	2.7
Germany	1.4	-1.2	1.4	-4.1	1.4	2.4	1.5
Greece	3.9	-0.5	-1.8	6.2	6.3	3.7	6.4
Ireland	7.7	-4.7	5.9	13.5	8.2	11.2	7.0
Italy	1.2	-2.8	-0.7	2.5	0.9	3.1	1.8
Luxembourg	5.2	-4.0	1.2	4.0	5.4	6.5	5.6
Netherlands	2.3	-2.3	0.7	2.5	2.3	3.6	2.9
Portugal	1.7	-5.6	-0.1	2.4	1.8	2.4	3.9
Spain	3.6	0.5	1.4	8.2	3.1	5.3	3.4
Sweden	2.8	-5.2	1.7	3.7	2.7	3.4	3.7
United Kingdom	2.8	-4.1	-1.2	4.3	2.9	5.4	3.3
EU 15	2.2	-2.2	0.4	2.7	2.3	3.7	2.6

Source: Eurostat/OECD/TNO

Although sectoral growth patterns do not reveal anything on relocation itself, they are proof of the natural growth tendency of western economies: a decrease in agriculture, a stabilisation or – as in Europe – slight increase in industry, and significant growth in commercial and (especially) financial services, at least where their share in value added (and likewise GDP) are concerned.

When we focus on employment by country and by sector, roughly the same pattern arises. Total employment growth in the EU-15 in the period 1995–2005 appears moderate but positive, with an overall annual growth rate of 1.1 per cent (see Table 2.2). Employment in the EU-15 as a whole amounted to some 175 million jobs in 2005. Between 1995 and 2005 roughly 1.8 million jobs have been created (not shed!) each year. Employment in agriculture and manufacturing decreased, by 1.8 and 1.0 per cent respectively each year. Financial business services showed the highest growth of employment (3.4 per cent). Positive employment growth was also observed in the construction sector (2.5 per cent), the transport, trade and communication sector (1.3 per cent) and in other services (1.5 per cent).

Table 2.2: Employment growth by country and sector (EU-15), period 1995–2005 (annual averages)

Employment	Total	Agriculture	Manu- facturing	Con- struction	Trade, transport & communi- cation	Financial business services	Other services
				%			
Austria	0.7	-0.9	-1.1	-1.0	0.8	4.7	1.2
Belgium	0.8	-3.2	-1.3	0.0	0.4	3.2	1.4
Denmark	0.5	-2.8	-1.8	1.6	0.9	3.3	0.6
Finland	1.6	-3.2	0.4	3.5	1.8	3.7	2.0
France	1.0	-2.1	-0.9	0.4	1.4	3.0	1.1
Germany	0.3	-2.3	-1.3	-4.0	0.5	3.7	1.1
Greece	0.5	-2.4	-1.0	2.5	1.1	3.7	1.3
Ireland	4.2	-2.3	1.3	9.4	5.4	7.9	3.7
Italy	1.1	-3.1	-0.3	2.2	1.1	4.4	1.2
Luxembourg	3.6	-1.7	-0.3	2.1	2.7	7.4	4.1
Netherlands	1.3	-0.6	-1.2	0.5	1.2	2.8	1.9
Portugal	1.3	-1.5	-0.9	4.5	2.0	2.4	2.0
Spain	3.4	-0.2	1.7	7.8	3.4	5.4	2.8
Sweden	0.5	-2.8	-0.8	1.1	0.5	3.0	0.6
United Kingdom	1.1	-1.8	-2.9	2.5	1.4	2.5	1.8
EU 15	1.1	-1.8	-1.0	2.5	1.3	3.4	1.5

Sources: Eurostat/OECD/TNO

Due to general economic development – measured as the increase in income and wealth – demand patterns will change. With every extra euro of income we demand relatively more services, whereas our consumption of goods on average tends to rise only slightly (for manufactured goods) or remains roughly the same (for food products). The major driving force behind economic development is labour productivity. The growth of labour productivity in manufacturing is a good indicator of economic change, dynamics and wealth.

The more dynamic the growth – that is, the substitution of low-productivity activity by manufacturing activity with a higher productivity rate – the better it is for labour productivity. Figure 2.1 illustrates how this process has evolved in the European context, showing a positive relationship between the growth of value added and growth of labour productivity in manufacturing. There are several factors and mechanisms that contribute to a higher growth of labour productivity: more skilled labour, a higher capital intensity, economies of scale, liberalised and open markets, outsourcing, and offshoring: that is, relocation broadly defined (see Section 1). From the point of view of productivity – the most important key variable driving income and wealth – relocation is part of a substitution process making use of spatial allocation. It should be emphasised that in this dynamic process that underlies shifts in productivity, the process of enlargement and integration of Europe itself is meant to enable, ease and speed up a number of these drivers, notably reaping the benefits of scale economies and creating competition. To be clear, part of the relocation issue has to be regarded as a result of the integration of Europe itself, resulting in more income and wealth as highlighted above.

Another important point is that high labour productivity growth in manufacturing generally should be seen as a sign of recovery and adaptation to new circumstances, i.e. to a new and more competitive Europe. Which of the Member States do in fact reveal a higher (or lower) productivity growth in manufacturing?

In Austria, Denmark, Germany, Ireland and Sweden we observe a strong development of the economy. Increases in manufacturing productivity are at the highest rates in the EU-15 (see Table 2.5). Yet these four countries are not comparable in any other respect. In Ireland, one of Europe's tiger economies,⁶ the economy has been quick in catching up from the rather low base levels of the 1980s. The substitution for old machinery of new is not dominant. It is rather new investment in new high technology, greatly enhanced by FDI that has engendered current growth. In Germany, on the contrary, restructuring is ongoing (for example in the car manufacturing industry), a direct result of high wage levels and strong competition from other countries, which have led to a process of disinvestments and job losses. Also, whereas Ireland also shows a strong growth rate for the whole economy, this is certainly not the case in Germany, where growth of GDP is low (1.4 per cent annually from 1995 to 2005: see Table 2.1).

Table 2.3: Value added manufacturing, annual average growth rate (EU-15), by period

	1995–2000	2000–2005	1995–2005	Difference 95–00/00–05
			%	
Austria	3.4	0.7	2.1	2.6
Belgium	1.6	-1.3	0.2	2.8
Denmark	3.7	0.1	1.9	3.6
Finland	4.5	0.4	2.4	4.2
France	0.3	-1.6	-0.6	1.9
Germany	1.8	1.0	1.4	0.8
Greece	-6.6	3.3	-1.8	-9.9
Ireland	11.1	0.9	5.9	10.2
Italy	0.6	-2.0	-0.7	2.5
Luxembourg	3.0	-0.5	1.2	3.5
Netherlands	1.1	0.3	0.7	0.8
Portugal	1.9	-2.1	-0.1	4.0
Spain	3.1	-0.2	1.4	3.4
Sweden	2.2	1.3	1.7	0.9
United Kingdom	0.0	-2.3	-1.2	2.3
EU 15	1.3	-0.5	0.4	1.9

Source: Eurostat/TNO

On the other hand, it is observed that the Mediterranean countries – France, Spain, Italy, Greece and Portugal – have rather low levels of labour productivity growth in manufacturing (see Table 2.5). There are two major reasons for this low increase in labour productivity: a (still) intensive use of labour in manufacturing industries and stagnating economic dynamics. This implies that the processes that should contribute to a higher rate of labour productivity growth are lacking in comparison with the other EU-15 countries. A range of factors might cause this feature; relocation is only one of them.

⁶ Most of Europe's tiger economies belong to the new EU-12: the Baltics, Slovenia and to a lesser extent the Czech Republic and Slovakia.

Table 2.4: Employment manufacturing, annual average growth rate (EU-15), by period

	1995–2000	2000–2005	1995–2005	Difference 95–00/00–05
			%	
Austria	-0.9	-1.3	-1.1	0.5
Belgium	-0.7	-1.8	-1.3	1.1
Denmark	-1.3	-2.3	-1.8	1.0
Finland	1.9	-1.1	0.4	3.1
France	-0.4	-1.5	-0.9	1.1
Germany	-1.1	-1.6	-1.3	0.5
Greece	-0.7	-1.4	-1.0	0.6
Ireland	3.4	-0.7	1.3	4.1
Italy	-0.3	-0.3	-0.3	0.0
Luxembourg	-0.1	-0.5	-0.3	0.4
Netherlands	0.1	-2.4	-1.2	2.5
Portugal	0.0	-1.8	-0.9	1.9
Spain	3.6	-0.1	1.7	3.7
Sweden	-0.1	-1.5	-0.8	1.4
United Kingdom	-1.4	-4.4	-2.9	3.0
EU 15	-0.3	-1.6	-1.0	1.3

Source: EUROSTAT/TNO

Table 2.5: Growth in labour productivity manufacturing, annual averages (EU-15), by period

	1995–2000	2000–2005	1995–2005	Difference 95–00/00–05
			%	
Austria	4.2	2.1	3.2	2.2
Belgium	2.3	0.6	1.4	1.7
Denmark	5.1	2.4	3.7	2.7
Finland	2.6	1.5	2.0	1.1
France	0.7	-0.1	0.3	0.8
Germany	2.8	2.6	2.7	0.3
Greece	-5.9	4.6	-0.8	-10.5
Ireland	7.7	1.6	4.6	6.1
Italy	0.9	-1.7	-0.4	2.6
Luxembourg	3.0	0.0	1.5	3.1
Netherlands	1.1	2.7	1.9	-1.7
Portugal	1.9	-0.2	0.8	2.1
Spain	-0.5	-0.1	-0.3	-0.3
Sweden	2.2	2.7	2.5	-0.5
United Kingdom	1.4	2.1	1.8	-0.7
EU-15	1.6	1.1	1.3	0.5

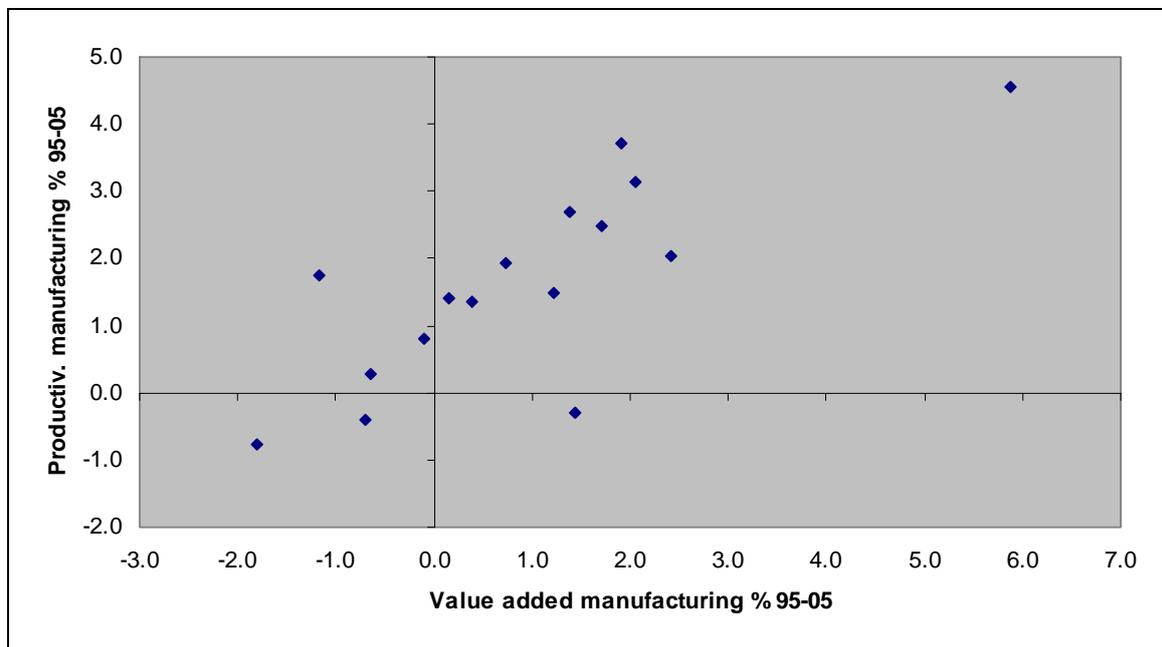
Source: Eurostat/TNO

The figures also show that, for example, Italy is still in a process of adaptation to the euro; devaluation of the lira to enhance its exports is no longer possible. A better export position requires a better competitive position, and that can only be reached by moderate wage growth, better products or higher efficiency. As long as this does not occur, productivity growth will be low. We do observe notable differences between countries. This has to do with differences in institutional structures, especially with regard to market structure and competitiveness. This would suggest that different policies are needed in Europe to address relocation issues.

If the 1995–2005 period is broken down into two sub-periods, 1995–2000 and 2000–2005, we observe one period with an economic upswing and one with a downswing. In general, in an upswing employment is generated, while in a downswing employment is reduced in order to meet lower demand. The speed of the rise and decline in employment is however indicative of the dynamism in the economy.

Downswings are periods in which entrepreneurs have to diminish capacity in order to meet lower demand. In general, the number of employees has to be reduced, which is always a painful process. In most cases, the result of this process is that excess employment, built up at the end of the preceding upswing, is wiped out. Also, production plants that are no longer productive (i.e. profitable) are closed down, or are delocalised. In general, the less productive employees are made redundant. The result is, on average, a higher labour productivity: firms with a relative high productivity survive. If this process of adaptation occurs smoothly, it is beneficial for the overall economy. In addition, higher productivity in certain sectors generates demand for the so-called non-tradable personalised services.

Figure 2.1: Growth rate for value added and labour productivity in manufacturing by country (EU-15), 1995–2005



Source: Eurostat/TNO

If we take a look at the development of employment during the years 2000–2005 (Table 2.4), we see that in the United Kingdom (-4.4 per cent annually), Denmark (-2.3 per cent) and the Netherlands (-2.4 per cent) the loss of manufacturing employment is the highest of the 15 observed countries. In Italy and Spain we see the lowest cuts in employment.

The countries with the highest loss of employment are located in the north-western part of Europe; we can imagine that the relatively high cost of labour results in a higher reduction in employment levels, and a substitution of labour by capital. In the case of Italy, we are inclined to think that relations between employers and employees do not permit large job reductions. Italy's economic backbone consists of many small and medium-sized companies (SMEs) based on family and tradition, resulting in a culture where trust between employer and employee prevails. In addition, because of the introduction of the euro, monetary instruments (devaluation of the lira) can no longer be used to improve Italy's export position. World market prices are now 'given' for Italian manufacturing producers and exporters (particularly in the Eurozone), which means that they have to compete on quality and productivity only. Considering the slow GDP growth, the weak employment growth and an apparent decrease of productivity, it seems that the Italian economy is struggling with this problem.

We cannot go into too much detail to explain the specific developments and characteristics of each individual Member State, but the foregoing serves as a case in point, making it clear that large differences exist within Europe with regard to employment growth and productivity change. The figures suggest that Europe's economies have been converging since 2000; the bandwidth of growth figures between Member States appears to narrow from then. Since longer time series and more robust data are required to show this, we consider this only as a possibility here. What is very clear is that the rates of adaptation to new economic realities vary strongly between Member States. This in itself is a strong indication of the large differences, up to and including today, between the various Member States: in for example the differing role and power of labour unions, the level of competition in the various sectors across Europe, and national institutional and policy frameworks.

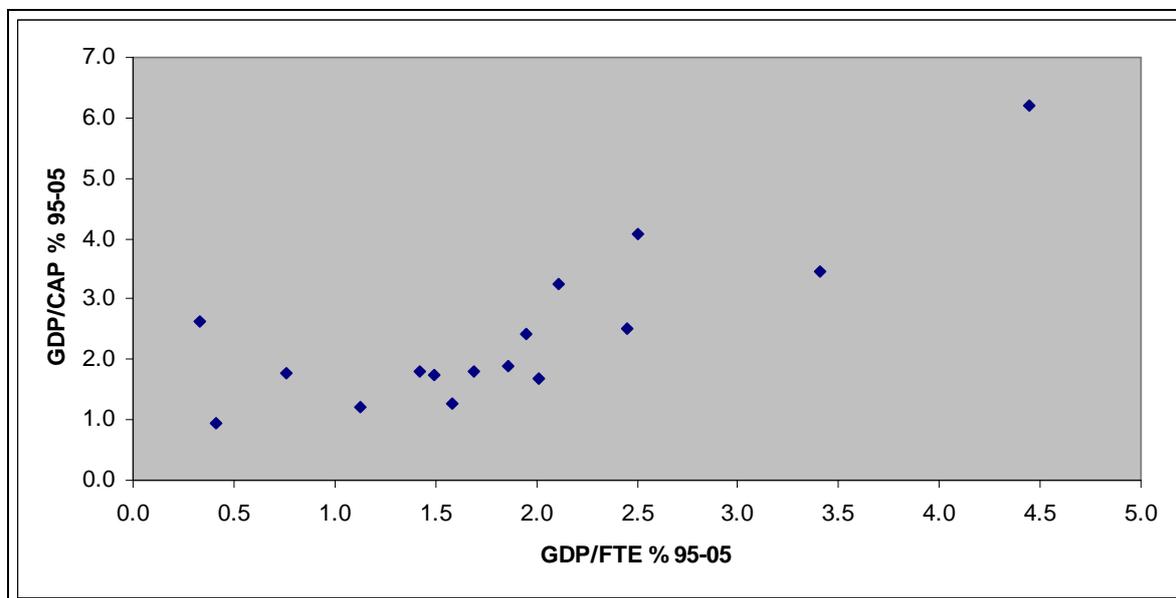
This section on the empirical context in which relocation takes place shows, without exploring in detail the extent of the relocation phenomenon, that relocation occurs in the context of very different economic realities in Europe. Fundamentally, relocation is only a small part of a process of economic change and structural adjustment in the various Member States towards higher labour productivity. This process is not uniform, however, and labour productivity is not increasing everywhere at the rates that should be expected. This implies that the substitution of labour for capital is sometimes hampered. This process can have many causes. We cannot identify them empirically here, but would suggest that they include:

- entry barriers
- strong regulatory burdens
- lack of competition
- wage bargaining and the influence of labour unions
- lobbying by interest groups
- other market failures (e.g. information asymmetries)
- last but not least, relocation.

It has to be understood that relocation is part of a process of restructuring, resulting in higher productivity and wealth. Disrupting it implies disrupting the process of generating (future) wealth and income. By the same token, part of the process of economic change and restructuring in Europe is dictated by the changes in Europe itself: integration of markets, the benefits of economies of scale that are reaped, changing comparative advantages of countries and regions, and a common currency. The last implies that interest rates and exchange rates are no longer a tool to influence the comparative advantage of individual Member States. The result of this is that firms are closed down and production and jobs relocated.

If the question of closing down a production plant arises as a result of the common market, the next question is of course, to which country should production move? The answer might be a different location within Europe, but it might also be a location outside Europe.

Figure 2.2: Relation between growth of labour productivity and GDP per capita, EU-15, 1995–2005



Source: Eurostat/TNO

Relocation is by definition part of an economic process that results in higher labour productivity and thereby wealth. Countries with higher labour productivity tend to have a higher GDP per capita. To further substantiate this argument: in countries with a high annual growth level of labour productivity, income and wealth also tend to increase at a higher rate. Evidence of this can also be observed in Europe over the preceding decade (see Figure 2.2). It should be emphasised that in the case of Europe, globalisation is only one of the factors that influence relocation. The internal processes of deepening European economic integration and the enlargement of Europe are important drivers as well.

2.6 Lessons for policy formulation

On the basis of the preceding analysis, the following lessons and conclusions can be drawn. First, various authors stress the limited extent to which relocation has been taking place so far. Relocation should hence be seen more as a ‘prospective’ phenomenon, rather than as something that greatly affects us now. Fear is largely misguided.

Second, globalisation and European integration appear to have lowered certain types of transaction cost, as have changes in communication, information and transportation technologies.

Third, some developing countries, notably India and China, have been able to improve the productivity of (part of) their labour forces, facilitated by significantly lower transaction costs. By opening up, integrating in the global economy and anticipating well the new opportunities brought about by ICT, they have created for themselves a competitive position that is hard to beat. This poses challenges in terms of structural adjustment world-wide.

Fourth, lower transaction costs have made impersonal services tradable. If the assumption is correct that wage–productivity trade-offs influence the location decisions made by companies, globalisation has allowed countries like India and China to become competitors in terms of wage–productivity profiles.

Fifth, the majority of companies do not appear to achieve major cost savings because of relocation. Other motives, such as improved access to foreign markets and development of strategic assets including human capital, also play an important role in relocation decisions. In advanced economies, notably the European Union, the determining factor for retaining or losing jobs is not low wages but productivity performance. As transaction costs in international trade for impersonal services will decrease over time, it is not unlikely that these services will follow agriculture and manufacturing in becoming declining sectors in terms of employment and relative contribution to income and wealth. In line with Blinder (2005), we argue that this shift is not just business as usual, but requires major readjustments in the years to come.

Sixth, because productivity is highly influenced by general economic performance, it is important to foster productivity by raising the natural growth rate of the economy, possibly via improved participation levels, changing the general retirement age to 67 or even 70, (re)training, stimulating mobility and so on. The ageing population adds to the momentum of the participation problem, and creates a risk of high inflation and high interest rates, which could in turn lead the wage–productivity level to deteriorate, favouring the relocation of jobs. A final and special remark holds for the disciplining force of competition. Competition, like labour participation, fosters productivity and prevents wages from over-reacting to economic shocks like ageing or low levels of participation. Likewise, it gives companies an incentive to produce efficiently, thus fostering productivity. International competition hence should not be regarded as a *curse* but rather as a *cure*.

3 Review of policy responses addressing relocation

3.1 Policy treatment, but not without an adequate diagnosis of the problem

One of the conclusions of Section 3 was that the overall economic magnitude and impact of relocation is comparatively small. While relocation may cause serious discomfort to the workers and families facing displacement, the extent to which these job losses occur appears to be modest relative to both the size of the European labour market and the ‘normal’ process of job creation and destruction. Future quantifications, such as by Forrester (2004) predicting *cumulative* job losses of 1.17 million for the EU-15 by 2015, might seem enormous, but dwindle when analysed, set and compared in the right perspective.

Even if the current economic implications of relocation are minor, and equal assessments may apply to the foreseeable future, there is every reason to take relocation seriously. This should, however, be done against the background and in relation to the much more broadly encompassing context of increasing globalisation and rapid technological change. Rather than judging relocation in isolation, its incidence and broader impacts should be analysed and approached as part and parcel of a more all-embracing process of structural economic adjustment. Relocation is but one part of the equation, and a minor part of it, with most attention focusing on the negative (destruction of jobs, capital divestiture) rather than on the positive (reconfiguration of value chains, orientation towards new markets, etc.). The connotations of fear and anxiety, spread predominantly by the popular media, could equally be complemented by more positive publicity associated with new opportunities of creating value and wealth in a larger and more dynamic world.

Relocation and deindustrialisation are the tangible and visible effects of a process of structural adjustment in which global economic integration and technological development are key. Even if we know that this process is ongoing and has most probably speeded up over the last decade, we do not know how far and how deep this process – sometimes referred to as the Third Industrial Revolution – has progressed, and will progress in the future. In the light of this, some scholars, most importantly Blinder (2005, 2006), advocate that relocation should predominantly be seen and approached as a ‘prospective’ phenomenon.

Rather than focusing on relocation as such, such an approach requires a much broader, more widely encompassing and future-oriented perspective. Tackling the direct and short-term effects of relocation should go hand in hand with a longer-term vision to enable citizens and firms to find their way and reap the benefits in a changing economic environment. While there is a role for government – at the EU or the Member State level – policies are no panacea *per se* and should not be seen as substitute for the ‘right’ mindset and behaviour to approach the future. Much will be dependent on private individuals rather than public initiative: that is, on the flexibility, proactiveness, inventiveness and creativity of individual citizens and firms to adapt to changing conditions and circumstances.

At this point, it is worth noting that although the *occurrence of market failures* is a clear rationale for government intervention, it is not a must. Government intervention does not always offer the right treatment either. Government intervention can involve problems in terms of distorting markets, introducing new rigidities and the like. The problems that government (at either Member State or EU level) can cause, generally known as *government failure*, should be taken into consideration when defining policy initiatives in the first place. The right question to ask is whether government intervention can be expected to solve the existing market failure with a reasonable chance of success. Government intervention should be considered only when the prospective welfare losses caused by government failure do not exceed the expected welfare gains of solving market failure.

Policy initiatives should therefore be evaluated with caution, bearing in mind the trade-off between market failure and government failure.

When designing policies to address the relocation issue in its wider context of global economic integration and technological development, a useful distinction can be made between measures aimed at mitigating or cushioning its effects and facilitating transition on the one hand (*adjustment assistance policies*), and measures aimed at creating sufficient growth and robust jobs on the other (*growth and employment policies*). To a certain extent, this distinction reflects a difference between short-term and longer-term policies, the former being relocation-specific in the sense of targeting the direct and immediate effects of relocation itself.

Apart from the usual mixture of measures aimed at maintaining macroeconomic stability, creating the ‘right’ business environment and investment climate⁷ and other so-called framework conditions, the focus of growth and employment policies should in particular be on coping with the main underlying processes associated with relocation, i.e. globalisation and technological development. Stimulating flexibility, adaptability and proactiveness are keywords here, and so is knowledge. The policies that are needed to confidently approach the future in the face of globalisation and technological development reflect to a large degree the policies that facilitate and stimulate a vibrant knowledge-based economy. This calls not only for investments in talent (human capital), capital and technology, but also for further liberalisation and increased flexibility of labour and capital markets, among other actions.

It should be emphasised that a ‘proven’ set of policies to address the causes and remedy the adverse effects of relocation does not exist. There is no such thing as a quick fix (or rather set of fixes), and none is offered here. The majority of available studies on relocation abstain from discussing policy options in detail. Their prime focus is on debunking and demystifying the magnitude and potential impact of relocation. When it comes to policies, most take a similar or equivalent approach to the one taken here, but only indicatively so (inter alia Mankiw and Swagel, 2005; Blinder, 2005, 2006; Bhagwati et al., 2004; BEPA, 2006), proposing short-term (trade) *adjustment* policies on the one hand and longer-term *growth and employment*-enabling and generating policies on the other.

3.2 Enabling and generating growth and employment - structural adjustment policy

In fostering growth and employment, both technological and non-technological (organisational, social) innovation is an essential condition. This is even more true in a world in which international competition has become fiercer and more pervasive, and technology, speed and time have become more important. While maintaining competitiveness is key, other factors such as social (and cultural) cohesion and environmental sustainability should not be forgotten. This includes finding answers to climate change problems, decreasing pollution, reusing and recycling materials, and inventing and expanding (uses for) alternative energy sources.

If our ultimate common goal is the maximisation of societal welfare, or in popular terms our quality of life, adequate attention should be paid to issues of *resource allocation in the broadest sense*. This not only means how to use and smartly combine (human) labour, capital, renewable and non-renewable natural resources and energy sources, but also what (new) goods and services we should consume to enable us to maintain a good quality of life while taking account of future generations.

⁷ The term ‘business environment’ covers a number of aspects. To give a flavour of what is behind it we present the aspects that are taken into account in the WorldBank’s BEEPS (Business Environment and Enterprise Performance Survey) designed to examine the quality of the business environment on a country-by-country basis: problems doing business; unofficial payments and corruption; crime; regulations and red tape; customs and taxes; labour issues; firm financing; legal and judicial issues; and infrastructure.

In the longer term – 20 years or more from now – these will be even more pressing issues than today. Addressing some of the problems now would make life easier in the longer term, while adding to the cost-effectiveness of the measures needed (e.g. Stern; IPCC). The real challenge is to combine both the longer-term and the shorter-term goals, not losing sight of the necessity of staying in business and maintaining competitiveness today.

The launch of the Lisbon Strategy for Jobs and Growth and subsequent actions (including its revision decided in March 2005),⁸ as well as the policy recommendations of the Sapir Independent High-Level Study Group (Sapir et al., 2003), the Kok High Level Group (Kok et al., 2004) and the Aho Independent Expert Group (Aho et al., 2006), among others, can all be seen as variations on the theme of creating sustainable growth and employment in Europe in a changing context in which globalisation, international competition, accelerating technological change and demographic change (predominantly the ageing of the population) are key. This also applies to the recent policy recommendations by BEPA (2006) which focus on *improving Europe's competitiveness* by enhancing existing framework conditions. A comparative assessment of these *generic encompassing* sets of (proposed or realised) EU policies, each slightly different, to enable and generate growth and employment is beyond the purpose and the scope of this review. It should be noted that measures aimed at generating growth and employment can also be taken at the national as well as the sector level. Examples of the latter include EU sector-specific initiatives in shipbuilding (LeaderSHIP 2015), pharmaceuticals (G10 Medicines) and aerospace (STAR21) which provide for a longer term strategy for economic, social and environmental renewal, and hence contribute to the goal of enhancing the growth and competitiveness (e.g. CEC, 2003b; CEC, 2007a). Another EU sector-specific initiative is CARS 21, initiated to fight the high cumulative cost of regulation and its negative effect on global competitiveness of the European car industry. Among others, the CARS 21 Group identified 38 EC directives to be replaced with international UN/ECE (United Nations Economic Commission for Europe) regulations without any loss in safety and environmental protection levels. Measures at the national level to promote growth and employment include, for example, the new French industrial policy of *pôles de compétitivité*⁹ or *competitiveness clusters* launched in 2004. The core idea behind the *pôles de compétitivité* is to mobilise and stimulate innovation and competitiveness, and hence to create growth and employment.

Whether generic or sector-specific, and whether formulated at the EU-level or the national level, these *growth and employment-enabling and generating policies* can all be considered as structural adjustment policies in the face of globalisation, international competition and technological change. However, they are not specific to the problem of relocation. The current adjustment challenge faced by the European Union is one that is shared by all advanced industrialised economies. It requires a broad policy mix that includes:

- macroeconomic policies that promote stability and growth
- liberal trade and investment policies that support structural adjustment by contributing to growth, innovation and competitiveness
- an institutional and governance framework that favours structural reform, while enhancing social dialogue and public understanding and acceptance of reform measures

⁸ Policy measures under the Community Lisbon Programme fall under three main areas: (i) knowledge and innovation for growth, (ii) making Europe a more attractive place to invest and work, and (iii) creating more and better jobs (e.g. CEC, 2005).

⁹ See, e.g. <http://www.competitivite.gouv.fr/>

- an efficient framework of regulation that achieves regulatory objectives while keeping regulatory burdens at a minimum, fosters competition and helps to ensure market openness
- labour market policies that help develop workers' skills and facilitate labour mobility across occupations, firms, industries and regions while providing adequate assistance to those who experience adjustment costs as a result of structural change (see also Section 4.3) (adapted from OECD, 2005: 2).

We shall concentrate the remainder of this policy review on *specific* policies addressing the phenomenon of relocation, rather than on the much broader policy agenda of structural adjustment in the face of globalisation, international competition and technological change. In doing so, we shall make a distinction between two types of policy measure. The first are measures aimed at mitigating or cushioning the short- and medium-term effects of relocation (largely reactive) by providing insurance, reducing inequality and enhancing the functioning of markets (see Section 3.4). The second set of measures is aimed at increasing the flexibility of Europe's citizens and firms, improving the ability to adapt and adjust to shocks, and enhancing the capacity to respond adequately to yet unknown features and requirements of the future global economy. (In other words, these are largely proactive policies.) A key element in making Europe ready for this future is education (see Section 3.5). Before addressing these relocation-specific policies, we shortly discuss the lurking danger of retreating to protectionism (see Section 3.3).

3.3 Beware of the bogeyman of protectionism

The relocation debate calls for an important warning, as not only the do's but also the don'ts deserve mention here. At any cost and at any time, a retreat to protectionism should be avoided. Trade, international competition and technological change are the main pillars and driving forces behind the processes of specialisation and comparative advantage on which our wealth and welfare are built. Enabling and enhancing trade – the free movement of goods and services between countries – is hence vital. The free movement of capital (both financial or physical) and labour (blue-collar and white-collar workers alike) within and between countries adds to this process of specialisation and creating comparative advantage.

In Section 2 we pointed at the existence of major labour market rigidities: the wage bargaining power of trade unions, high income taxes, job protection and the like. The influence of the wage–productivity profile of regions was also stressed: a favourable combination of wages and productivity (that is, low wages and high productivity) increases employment. Job protection has the important disadvantage that the connection between wages and productivity is lost. Likewise, protection of national/regional produce damages the connection between productivity and competitiveness. Protectionism, in other words, provides the wrong incentives for growth in productivity.

Unemployment in Europe still remains at persistently higher levels than those in other developed countries, and averages almost twice the normal or 'friction' rate of unemployment (which is considered to be around 4 per cent by most economists). If unemployment is lower than 4 per cent, it hampers job flexibility and fosters inflation, since wages are likely to rise faster than productivity levels. However, this appears not to be a European problem at present. The reallocation of employment implicit in and underlying relocation constitutes both an opportunity and a threat. If Europe succeeds in reallocating labour more efficiently, this will act as a two-edged sword: it will enable overall productivity to rise and at the same time bring employment and purchasing power to higher levels.

However, the aforementioned disturbing effects of rigidities in the labour market and other markets might, if not mitigated, pose the threat of an increasing mismatch between supply and demand, involving many unfilled vacancies simultaneously with high unemployment. Wage levels can be determined by the market; it is rather the future flexibility of job mobility and productivity that needs to be addressed. Interesting policy initiatives from this point of view are in the field of education, taxation, work and re-employment incentives, and the training and protection of workers.

3.4 Mitigating and cushioning the short- and medium-term effects of relocation

The consequences of relocation in the source (i.e. home) country may manifest themselves in various ways. Apart from job displacement they may include various degrees of reorganisation, and as a worst-case scenario, the closing down of firms. The adjustment process following relocation can be painful for both the individuals and the communities involved, whereas the costs to society in terms of human capital and physical capital losses might be considerable. For workers, the main risks following job displacement as a result of relocation are long-term employment and persistent under-employment (i.e. re-employment at significant lower wages), apart from the direct loss of income associated with job displacement. For communities and society at large, relocation may lead to under-utilisation of resources, as well as a loss of social cohesion.

The economic rationale for ‘post-relocation’ policy intervention is fourfold, and includes allocative and dynamic efficiency, equity and political economy arguments (e.g. OECD, 2005b):

- Market failure following displacement as a result of information problems (essentially problems in the functioning of labour markets, with e.g. workers not being aware of new jobs for which there is a demand), resulting in the under-employment of productive capacity (an efficiency argument).
- Market failure as a result of spatial or locational factors. In densely populated and growing regions or agglomerations (most often urban regions), displaced workers may easily find new job opportunities, because factor inputs are scarce and employers have to compete to hire employees. In more peripheral regions (often rural regions), factor inputs tend to be less scarce and displaced workers may not have any alternative. Failure of regional labour markets may be an argument for government intervention, in the form of either general policies to attract new investment to the region, or other ways of addressing flexibility (e.g. by introducing mobility incentives) (another efficiency argument).
- Adjustment costs being borne by a minority of workers, while the wider benefits from relocation and trade in the form of lower prices, etc. are enjoyed by the general population. This suggests that compensation might be provided, and would most probably be useful in maintaining stability and social cohesion (an equity argument).
- No assistance would erode the credibility and support for an open trading system in the medium and longer term (a political economy argument).

The policy challenge is to enable a smooth adjustment process following relocation (i.e. trade-related displacement¹⁰) and to take the best advantage of new opportunities. This calls for a reallocation of resources, most importantly labour, while limiting the hardship and overall adjustment costs involved, for individuals, communities and society as a whole.

¹⁰ As was explained earlier, from an economic-theoretical point of view, international sourcing (relocation) is a form of trade (Bhagwati et al., 2004).

Policy options range from social safety nets and reactivation policies to more specific targeting of displaced workers and affected regions.

3.4.1 Direct assistance: social safety nets and active labour market programmes

It is important to protect *workers*, not *jobs* (Blanchard, 2005). In terms of available policy responses, there appears to exist a wide consensus on the desirability of an adequate social safety net to mitigate the negative effects on (at least the most) disadvantaged. Direct assistance to trade-displaced workers could – apart from a system of unemployment insurance – also include more specific policies to reactivate workers by means of ALMPs (OECD, 2005, 2005b). ALMPs include job-search assistance, counselling, retraining, mobility allowances and other re-employment services. A general principle in best practice for ALMPs is that programmes should address individuals' needs. The purpose of providing unemployment benefits through ALMPs is to cushion the impact on the incomes of those workers affected by structural change (on a temporary basis) while at the same time facilitating re-employment (BEPA, 2006). One of the challenges and inherent difficulties of benefit systems is to provide sufficient reactivation incentives. An effective social safety net will not only ease the pain, but will also speed up transition (Blinder, 2005). Over the last decade, EU Member States have been active in improving the effectiveness of existing safety net provisions as part of an overall reform of their welfare systems. 'Best practice' examples, like the Danish model of 'flexicurity' (see Box 3.1), dominate the discussion. Another policy innovation that is frequently discussed in both academic and policy circles is wage insurance (see Box 3.2).

Box 3.1: Scandinavian success: the Danish model of ‘flexicurity’

Over recent years renewed interest in the Scandinavian countries was triggered by the debate of the reform of the European social model during the British and Austrian EU presidency (for further details on the Scandinavian model, see Annex 1). While France and Britain are usually taken as examples in Europe of state centred, respectively liberal market economies, the Scandinavian countries are often mentioned as an example of combining economic success with an extensive welfare state (Palme, 2005). The Danish concept of ‘flexicurity’ has received particular attention, and is also perceived by the Commission as the most promising way of adapting to globalisation (CEC, 2006b). However, how does ‘flexicurity’ work?, and can it serve as a blueprint for other countries?

The Danish labour market is as flexible as the British, and offers employees the same level of social security as the Swedish (Andersen and Mailand, 2005). It is often also referred to as offering ‘flexicurity’. However, the Danish experience shows that the model does not function solely through flexible labour laws and generous unemployment benefits, but incentives to work are also essential (Andersen and Svarer, 2006). The three pillars of the model are *flexible labour markets*, a *generous welfare system* and *active labour market policies* (ALMP) to retrain those out of work (Madsen, 2002). The low level of employment protection in Denmark results in high job mobility and low levels of job tenure by international standards, without leading to feelings of job insecurity, as this is compensated for through generous unemployment benefits of 90 per cent of previous income (ibid.). The unemployed are required to actively seek employment. If they fail to find a job within 12 months, 36 months of reactivation with ALMPs starts. A person who remains unemployed beyond the reactivation period it is not entitled to unemployment benefits, but instead receives social benefits, which provides an increasing incentive to participate in the labour market (ibid.). This policy is further complemented by high levels of investment in education and fostering innovation.

Can ‘flexicurity’ be replicated? In Denmark ‘flexicurity’ was implemented during a period of macroeconomic success, making it questionable how resilient the system is in times of recession and lower employment figures (Andersen and Svarer, 2006). Furthermore, the Danish system must be understood in the context of the society as a whole. Denmark has a strong societal and institutional consistency, which is the result of a long history of institutional arrangements (Lang, 2006). This means that ‘flexicurity’ can be used as an inspiration but not a model for other countries to copy one to one. However, the core message is to combine flexible labour markets with social protection, to foster employment mobility.

Box 3.2: Wage insurance: helping workers to take up jobs?

The basic mechanism of wage insurance is simple, even if the details can become complicated. Unlike unemployment benefits, wage insurance takes effect only after a laid-off person finds a new job. If the new job pays less than the previous job, a percentage of the difference between the new and old salary will be compensated for. This insurance is usually capped to an annual total to focus on low income earners, and fixed in duration; typically 12–24 months. Research has shown that 50 per cent of re-employed displaced workers in the United States experience income losses of more than 15 per cent (Bhagwati et al., 2004). The prime goal of wage insurance is to speed the re-employment of workers who have been permanently displaced, by increasing incentives for them to take up lower-paid jobs (Brainard et al., 2005).

While the idea of wage insurance was first proposed in the U.S. by Litan and Kletzter in 2001, it has only been partially implemented in the United States, in 2002 under the name of Alternative Trade Adjustment Assistance (ATAA). However, because of the poor implementation and strict eligibility criteria – it applied only to manufacturing workers who were 50 or older, with an annual income of less than \$50,000 – only 288 participants enrolled in 2003 (Brainard et al., 2005). Currently there is considerable debate in the United States surrounding the idea of extending the eligibility criteria. Since 1999 France has had wage insurance for workers affected by mass lay-offs, covering 75 per cent of their income loss for a maximum of two years. Since 2003 Germany has also had wage insurance for workers above the age of 50, covering 50 per cent of their income loss as well as topping up pension contributions to guarantee 90 per cent of the pension level of the previous job. This scheme is not limited in duration (BEPA, 2006).

While there is too little experience with wage insurance programmes to provide a full evaluation of their cost-effectiveness, a pilot project in Canada (‘earnings supplement project’) found that it marginally speeded re-employment by making participants consider a wider range of jobs, but the extra costs were not offset by savings in unemployment benefits (OECD, 2005c). Generally, the idea of wage insurance is a popular idea as it subsidises work rather than unemployment. It is also thought to speed re-employment, although the Canadian pilot only showed marginal results.

3.4.2 Targeted programmes for all trade-displaced workers: a useful complement or a redundant policy tool?

Much less agreement appears to exist about the need and usefulness of *targeted programmes* serving specifically relocation-displaced (i.e. trade-displaced) workers. The US Trade Adjustment Assistance (TAA) programme and the recently founded European Globalisation Adjustment Fund (EGF) are examples of trade adjustment programmes (see Box 3.3 for further details). One argument for introducing targeted policies on top of more general safety-net provisions is that workers displaced from jobs in those industries facing the most intense international competition are slower to become re-employed, and experience larger wage losses once re-employed, than do job losers in other industries (OECD, 2005: 25). On top of this, these workers are more likely to possess obsolete skills and are more in need of training to upgrade or reorient their skills (OECD, 2007). Arguments against specific targeting focus on the alleged adverse effect on re-employment and re-integration incentives (depending on the mix between unemployment benefits and reactivation), as well as more practical considerations that it is difficult to differentiate between trade-displaced workers and other job losers. Questions might also be raised about why it would be justifiable to introduce targeted programmes that favour one type of displaced worker, while excluding other unemployed people with similar labour market problems.

Box 3.3: Specific targeting – the case of trade adjustment funds

The general idea behind trade adjustment funds is to compensate for income losses and to speed up re-employment. The exact set-up of trade adjustment funds may vary in practice, but they generally comprise three components: workers are compensated for income losses, receive extra money for retraining, and are compensated for relocation costs. The experience with trade adjustment funds is long-standing, but uniquely confined to the United States. In 1962, a TAA programme was set up to compensate manufacturing workers suffering from job losses as a result of trade liberalisation, and to make transitions to growing sectors less painful. This was accomplished primarily through the provision of income support and re-employment services, but the programme also offered assistance to firms in need of restructuring in the 1960s (Brainard et al., 2005; OECD, 2005). After successive revisions, with emphasis shifting forth and back between supplementary unemployment benefits and training, TAA now includes, inter alia, an experimental wage insurance programme for older trade-displaced workers above 50 and a refundable health tax credit, along with traditional TAA elements such as remedial education. Most independent scholars have called for further improvements of the TAA, by expanding it to include workers affected by offshore outsourcing (Bhagwati et al., 2004), including those in the offshored services industry (Brainard et al., 2005), and generally making it bigger and better (Blinder, 2005; Mankiw and Swagel, 2005).

Various proposals have been made for a similar trade adjustment fund in Europe, including plans for a ‘Restructuring Fund’ in the Sapir Report, and Commission plans for a ‘Growth Adjustment Fund’ in 2004 (BEPA, 2006). The EGF, proposed by Commission President Barroso, agreed at the Hampton Court Summit in December 2005 and adopted by the European Parliament and the Council in December 2006, is the first fund at European level to come into existence. It allows Member States to claim financial assistance for workers made redundant in those areas most adversely affected by economic dislocation as a result of changes in global trade patterns. Interventions may be made when there are at least 1,000 redundancies in a given company or sector. The EGF has a foreseen annual budget of €500 million, which may benefit up to 50,000 workers. It may be used for personalised retraining, job search assistance, promoting entrepreneurship and assisting self-employment. It includes special temporary ‘in-work supplements’ for those participating in training, and complementary wage allowances for workers over 50 (CEC, 2006, 2007). The EGF is only targeted at workers – including those who worked for suppliers of directly affected firms and sectors – and not at the restructuring of firms. So far two formal requests have been made by France. Moreover, several cases are said to be in the pipeline (CEC, 2007).

The history of the TAA in the United States is not very comforting for those concerned about the overall effectiveness of such programmes, as it is frequently criticised for not achieving its goals (Froning, 2001; Brainard et al., 2005). Furthermore, the TAA has only to a limited extent been tailored to the distinct needs of trade-displaced workers: rather, it gives similar support to other active labour market policies (OECD, 2005). It also appears that the TAA exists primarily for political reasons (to encourage public opinion to favour trade liberalisation), as changes have often coincided with new trade negotiation rounds (ibid.). Political support for the TAA is also driven by relatively low unemployment insurance support in the United States (ibid.). This could explain why such a programme has not been widely adopted in Europe to date. The main criticisms surrounding the EGF include concerns over whether such a fund should be implemented at all, opponents who argue that restructuring policy should be left to the Member States (e.g. EurActive, 2006b), concerns about possible mismanagement and heavy bureaucratic procedures, and the scale of the problem being too big to be adequately tackled even at the EU level (Tsoukalis, 2005).

Another argument against is that trade adjustment programmes are prone to lobbying and political capture, as the US example shows (OECD, 2005: 56).

While some US studies on offshoring and dislocation express a preference for TAA, most agree that improvements are needed to the current set of TAA policies (e.g. Mankiw and Swagel, 2005; Blinder, 2005). Blinder (2005) comments that *'the performance record of trade adjustment assistance to date has been less than stellar—and we've had it in the U.S. for over forty years'*. He calls for a 'whole new look' at such programmes, making them both bigger and better. The American experience and the major criticisms about its workings and effectiveness carry important lessons which should be taken on board in the context of the recently launched EGF. One point that needs attention when discussing the EGF is that the continued support for TAA in the United States might be related to the relatively modest levels of support provided by the general unemployment insurance system and active labour market programmes. In the European Union there is a very different picture regarding the level and duration of unemployment programmes, although there is a large variation between Member States.

3.4.3 Targeted programmes for specific groups of trade-displaced workers: towards tailor-made solutions

Rather than targeting all trade-displaced workers, the choice could be made to give specific targeted support to defined displaced groups for a limited period of time, to ease and speed up the process of labour reallocation. An argument for such specific targeting is that the effects of relocation – and globalisation in general – tend to be localised, hitting specific regions and/or sectors (OECD, 2005). Localised specific targeting of specific groups of trade-displaced workers (e.g. the unskilled) seems especially valid when the impact of relocation threatens to distort the existing local labour market, with reallocation of labour appearing difficult in the face of insufficient local alternative employment opportunities. Policy measures could take the form of occupational incentives (training) but also of geographical mobility incentives, such as relocation grants and mobility assistance to induce workers to move elsewhere (BEPA, 2006; OECD, 2007).

A particular advantage of targeted programmes is that real tailoring to meet specific needs of displaced workers becomes a possibility. The OECD (2005) offers clear arguments why such targeted programmes should, however, remain exceptional and limited to cases where they offer a clear advantage over general unemployment benefits and reactivation programmes. Time-limited cost-effective programmes with clear exit strategies are important to prevent targeted assistance from becoming a barrier in the end rather than an aid to smooth adjustment.

Targeting could also take the form of notifying displaced workers in advance. Research, especially in the United States, shows that workers who receive an advance warning of redundancy spend less time unemployed than workers who do not (OECD, 2005; BEPA, 2006). This effect can be enhanced when it is combined with job-search assistance or retraining during the notice period. As BEPA (2006) remarks, however, advanced notice may be associated with severe information problems, which make anticipatory policy action difficult and potentially even counter-productive (and hence most probably supplanting market with government failure). Hence preventive assistance should be given only in anticipation of predictable shocks, based on credible and robust pre-information.

3.4.4 Relocation and regional and sector policy support: putting the cart before the horse?

Instead of targeting support to workers, policy support could also be targeted at firms, industries or regions.

While there is some evidence of countries applying these kinds of adjustment support, the conditions for success or failure of such policies remain unclear. Sectoral support to improve the competitiveness of affected industries can be regarded as a form of ‘picking losers’ (an even less desirable variation of the ‘picking winners’ type of support, which is itself undesirable), and is in fact a way of introducing protectionist policies through the back door. On top of this, the track record of the traditional industrial support policies of the 1970s and 1980s has, as we now know, not been particularly good, to say the least.

Measures to revitalise the local economy – a form of regional policy – might be a different thing, although this would depend on the form and method in which such support was provided. Again, the support should be temporary, and there must be a prime focus on adjustment and renewal. BEPA (2006) provides a case for short-term (EU) coordinated regional policy support where shocks have a symmetrical impact across several regions. Again caution is needed in how this support is given. There is also a question about the longer-term pay-off in supporting losers – firms, whole industries or regions – compared with other alternatives for spending scarce public resources. It might be more beneficial to concentrate support on booming regions and sectors (backing winners) rather than focus on the less successful ones, which are losing out in the face of global competition. Recently some Member States, such as the Netherlands, have for this reason abandoned the support of economically deprived regions altogether, and have drastically changed their policy to back winners, i.e. predominantly successful regional clusters.

3.5 Increasing the flexibility of markets and improving the ability to change

One of the alleged weaknesses of the European economy, compared with for instance the United States, is its structural labour market rigidities (Blinder, 2005). Part of this lack of flexibility is caused by the (still) highly fragmented and compartmentalised nature of the European labour market, and the lack of trans- and even intra-national geographical mobility of workers, even in the higher-skilled segment. Flexibility is also concerned with being able to cope more readily with non-routine tasks and occupational change, something that is at a premium in an era of increasing globalisation and strong technological development. Another part of the lack of flexibility is related to institutional failure and policies in need of modernisation, ranging from regulatory burdens at both Member State and European level to (overly) generous welfare systems with little incentives to (re)activate the unemployed and increase labour market participation. More wage flexibility, and reforming tax and social benefit systems into lean and mean modernised systems, are necessary elements in moving towards more flexibility (see Section 3.1).

Box 3.4: Human capital investment tax credit to ensure a skilled workforce?

‘Human capital investment tax credit’ is a tool to ensure that workers retain the right skills on the job through continuous (i.e. life-long) learning (Mann, 2003). This tool is particularly targeted at those workers, particularly in technology-related sectors, whose skills depreciate very quickly with accelerating technological change. In this case their career path remains viable but a mismatch between worker skills and firm demands leads to potential offshoring. The tool is not aimed at workers whose jobs are gone for good and have no future. For this category of workers Mann advocates a combination of unemployment benefits, wage insurance and training credits.

The tax credit aims to create a continuous skill pipeline of technical workers by giving firms and workers tax credits of 100 per cent and more of training costs. The tax credit would function in a similar way to the R&D and investment tax credits that have already been implemented. These are generally justified using ‘spillover’ arguments, which Mann claims also apply to human capital. She points towards three realities in the market for technical skills, in addition to skill depreciation and competition. Firms are reluctant to invest in training workers, as they face the possibility that the workers will then be poached by competitors that try to ‘free ride’. Furthermore, due to spillover effects the benefits from training and education to society are larger than the direct benefits accruing to the individual worker or firm. These two effects form classic economic arguments for justifying policy intervention (Mann, 2004).

A human capital tax credit makes more sense with the advent of a knowledge-based economy, where human capital is regarded as the most important asset. Giving preferential tax treatment in the form of tax credits to physical (rather than human) capital is hence not the most logical action. A form of human capital tax credit has already been implemented in Austria, where companies can deduct up to 120 per cent of training costs from profits (Kok, 2003: 51), and in the Netherlands, where individuals can deduct up to €15,000 and firms 120 per cent from taxable income (ILO, 2007). When the training targets low-skilled workers, older workers (aged over 40) or workers in small enterprises, firms can deduct 140 per cent of training cost, as these target groups represent the biggest challenge for reemployment (ibid.). Data on the effectiveness of these schemes is not yet available. However, to ensure that the tax credits are used most effectively, they could be linked explicitly to employees, to ensure that companies use the resources for programmes that benefit the workforce. Moreover, other forms of support for training such as public financing should be considered along with the potential use of tax credits.

In view of the oncoming challenges posed by globalisation, such as increasing offshoring of ‘impersonalised’ services, Europe needs to improve its ability to adapt and adjust to shocks (BEPA, 2006). In doing so, flexibility and adaptability are essential requirements. In facing the new and unknown, education is vital as well. In an increasingly knowledge-based economy, the demand for high-skilled workers will most likely continue to grow. Upgrading the stock of human capital through training and education is one of the strategies to improve Europe’s adaptive capacity. There is a need to adjust educational systems in the face of new and changing systems of production (Ridell, 1996; Jansen and Lee, 2007), as well as to go beyond traditional classroom education, with on-the-job and life-long learning types of trajectory. Blinder (2005) makes a very important observation, which needs to be taken very seriously in preparing ourselves and our children for the future. It is not so much *how much* we educate, rather *how and what* we educate, that matters.

The necessity for education and training is even higher if the impact of ageing is taken into account, since this implies an overall decline in Europe's labour supply. As a result important skill shortages across industries can be expected (Van der Zee and Brandes, 2007). The overall impact of ageing will be felt particularly in Japan and Europe (where it expected to bite shortly after 2010), but also in China. The United States and India have relatively 'young economies', however. One of the implications of Europe's shrinking labour force is that, if annual aggregate growth of 2–3 per cent is to be sustained over the next decades, both capital accumulation and productivity will have to accelerate dramatically (Poncet, 2006; WorldBank, 2007).

The ability to adapt and to respond flexibly to structural change should be at the heart of the policy recipe to address the phenomenon of relocation in the medium and longer term. This adaptive ability has first and foremost to be sought in the human capital stock. Education (from primary school to university), (re)training and life-long learning are policy instruments to foster the capacities and abilities of our labour force and the population at large. In the future knowledge-based society, investments in human capital are key. The quality and creativity of Europe's labour force form the basis to maintain its competitiveness, from the micro level (of firms) to the macro level (of Member States and the European Union as a whole).

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Annex 1. The Nordic model – a blueprint for Europe?

Over recent years renewed interest in the Nordic or Scandinavian model was triggered by the debate of the reform of the European social model during the British and Austrian EU presidency. While France and Britain are usually taken as examples in Europe of state centred liberal-market economies, the Scandinavian countries are often mentioned as an example of combining economic success with an extensive welfare state (Palme, 2005). However, what exactly is the Nordic model? And can it serve as a blueprint for other countries?

First of all, there is no single Nordic model, and still less is there an unchanging Nordic model (Sachs, 2006). The problems in the Scandinavian countries after the first oil crisis in the 1970s forced them to undergo reforms and open up to globalisation, paving the way for success in the last decade. The key feature of this model is the combination of a liberal economy with social equality. In practice this is often referred to as 'flexicurity' – the combination of flexible regulation, high social security for the unemployed and active labour market policies to retrain those out of work (Schubert and Martens, 2005). This is further complemented with high levels of investment in education. This in particular is thought to have helped the Nordic societies to adapt to changing circumstances and to exploit the ICT revolution (*ibid.*). Education seems to be key, as a survey of workers in the Nordic countries found that they have a low skills gap from what is required on the job, that they participated in training recently and that they felt that there was no problem accessing training (Palme, 2005). This compared particularly favourably with southern European workers.

Flexicurity requires a strong welfare state with high levels of investment in education. However, the Nordic countries have relatively low tax rates on capital, instead generating the bulk of revenues from VAT, other taxes on goods, services and wage income. This allows them to combine high rates of taxation to finance the Nordic model, while benefiting from globalisation and internationally open capital markets (Sachs, 2006).

Can the model be replicated? The reform process in the Nordic countries is based on the importance of collective bargaining, providing high levels of consistency and continuity within the system (Schubert and Martens, 2005). Its characteristics include a high degree of political consensus fostered by small and homogenous populations with a preference for equality, inclusion and collective action. This makes the Nordic model difficult to export to societies with different cultural, political and institutional characteristics, particularly the Anglo-Saxon countries. Furthermore, the future of the Nordic model is dependent on a high tax base, which could be undermined by globalisation. A report by 'Open Europe' even comes to the conclusion that the success of the Nordic model is a myth and that instead other countries such as Ireland should be used as examples (De Vlieghere, 2006).

Annex 2. Recent innovations in labour market policy

In many European countries with high levels of labour regulations, dismissing workers is difficult and often leads to long legal procedures, which were designed to protect workers. However, the more difficult it is for firms to dismiss workers, the less likely they are to hire new ones. Three innovative ways show that the drawbacks of traditional severance pay systems can be reduced while ensuring adequate worker compensation, to increase overall labour mobility (OECD, 2007). The Danish example of ‘flexicurity’ is an example where dismissal procedures are light but workers are generously compensated using high unemployment benefits (see Box 3.1 for details). In the Netherlands employers increasingly opt for dismissals via court procedures. Although more expensive than the traditional procedure via the labour authorities (Centres for Work and Income), the process is speedier and generates a relatively predictable severance pay commitment, improving employer planning (OECD, 2007).

Another example is the reform of the traditional severance pay system in Austria, which had been criticised for inhibiting labour market mobility. The amount of severance pay previously increased every three years the employee stayed with the employer, peaking after 25 years. As employees lost benefits when voluntarily changing jobs, labour mobility was discouraged (Hofer, 2006). Under the new system employers pay a monthly contribution of 1.53 per cent of gross wages to an independent savings account. Should the employment contract be terminated by the employer, cash withdrawals can be made by the former employee, while otherwise accumulated entitlements remain in the savings account until retirement (ibid.). As the savings account is independent of the employer, the accruals stay with the employee and increase progressively over his or her working life. By reducing the incentives to stay with one employer, this example shows how labour mobility can be facilitated (OECD, 2007). These innovations are highlighted by the OECD (2007) as examples that show it is possible to reform too strict employment protection legislation (EPL), while achieving a good balance between fostering labour mobility and workers’ social security.